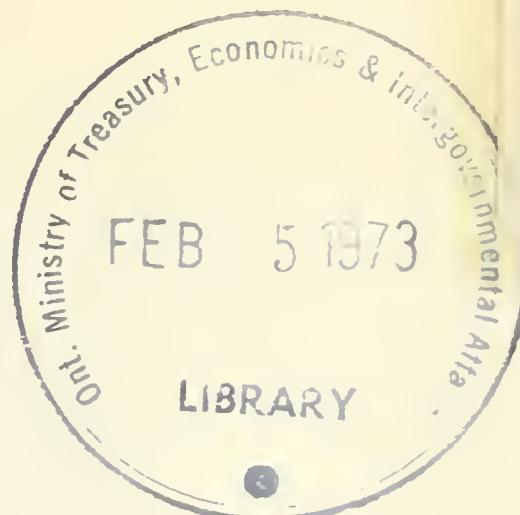


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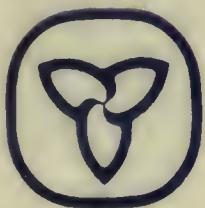
TASK FORCE HYDRO

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2. Hydro.



HYDRO IN ONTARIO A FUTURE ROLE AND PLACE

REPORT NUMBER ONE



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REPORT NUMBER ONE

*REPORT TO THE EXECUTIVE COUNCIL ON
HYDRO IN ONTARIO – A FUTURE ROLE AND PLACE*

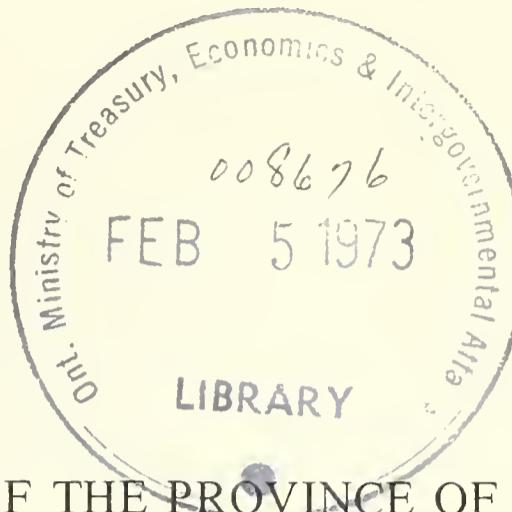
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COMMITTEE ON GOVERNMENT PRODUCTIVITY

FERGUSON BLOCK,
QUEEN'S PARK,
TORONTO 182, ONTARIO
TELEPHONE (416) 365-7121



TO HIS HONOUR

THE LIEUTENANT-GOVERNOR OF THE PROVINCE OF ONTARIO

MAY IT PLEASE YOUR HONOUR:

We, the members of the Committee on Government Productivity, appointed by Order-in-Council, dated 23rd December, 1969, to inquire into all matters pertaining to the management of the Government of Ontario and requested in the Speech from the Throne, dated 30th March, 1971, to review the function, structure, operation, financing and objectives of The Hydro-Electric Power Commission of Ontario, submit to Your Honour, herewith, a first report of Task Force Hydro containing their recommendations relating to a future role and place for The Hydro-Electric Power Commission of Ontario.

We have examined this report and have satisfied ourselves that the recommendations regarding the role and place of Hydro in the structure of the Ontario Government are in keeping with the overall concept and recommendations of the Committee on Government Productivity. Furthermore, the proposed form of organization for Hydro meets the criteria which the committee has agreed upon for a Crown Corporation.

Chairman



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TASK FORCE HYDRO

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Productivity of
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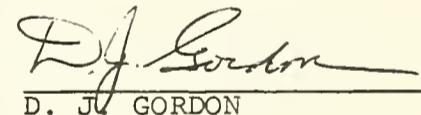
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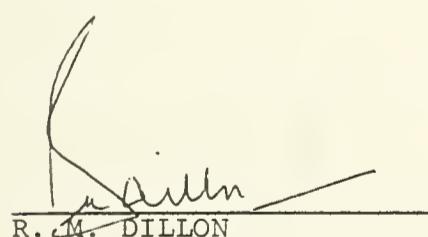
TO JOHN B. CRONYN, ESQ.

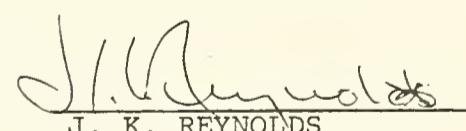
CHAIRMAN OF THE COMMITTEE
ON GOVERNMENT PRODUCTIVITY

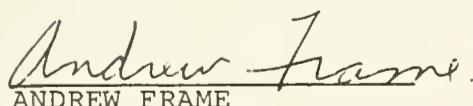
We, the members of the Steering Committee of Task Force Hydro, appointed by the Government of Ontario to review the function, structure, operation, financing and objectives of The Hydro-Electric Power Commission of Ontario, submit herewith a first report containing recommendations relating to a future role and place for The Hydro Electric Power Commission of Ontario.

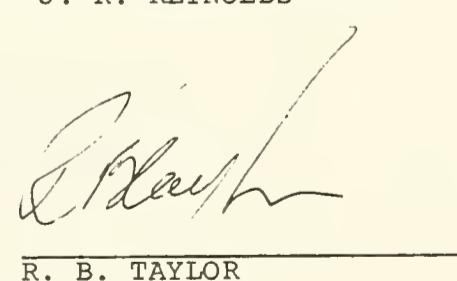

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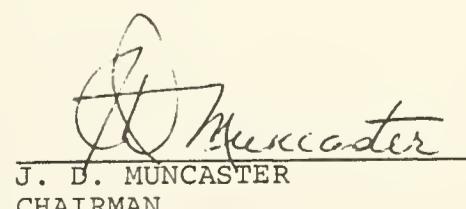

D. J. GORDON


R. M. DILLON


J. K. REYNOLDS


ANDREW FRAME


R. B. TAYLOR


J. D. MUNCASTER
CHAIRMAN

Note: Mr. Frame's acceptance of these recommendations is subject to the reservations expressed in his letter which is inserted as Appendix V.

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Unless otherwise indicated, all data are from Ontario Hydro.

INTRODUCTION

The annual report of Ontario Hydro records that total assets in 1971 exceeded \$5 billion. This was almost double the assets of 1959. In order to meet the demand for electrical energy, generating capacity is being increased at the rate of 7 percent a year and this rate of increase, if sustained, will result in capacity doubling every ten years.

Any economic activity of this size expanding at this rate cannot fail to have a far-reaching and growing impact on the Province of Ontario. Decisions taken can have broad economic and environmental significance. The particular relationship of Ontario Hydro to the public sector and the manner in which Ontario Hydro is fitted into the economic and political structure of the Province make inescapable a particular responsibility on the part of the Government of Ontario.

In recognition of this fact the Speech from the Throne delivered at the 4th Session of the 28th Legislature on March 30, 1971 included the following statement:

“The Government is determined to assure the adequacy of our energy supplies for the future. It will ensure that the energy is used as efficiently as possible and that its use will not adversely affect the environment, health or life. The government will strive to maintain a choice between the various types of energy to match them with those uses for which they are best suited. To this end the Committee on Government Productivity has been asked to review the function, structure, operation, financing and objectives of the Hydro-Electric Power Commission of Ontario.”

The procedure chosen by the Committee on Government Productivity for meeting the requirement enunciated by the Government was to delegate the responsibility for a study and assessment to a semi-autonomous body — Task Force Hydro — which would report to Government through C.O.G.P.

The C.O.G.P. directed Task Force Hydro to satisfy specific terms of reference:

- to recommend realistic, practical and innovative ways in which the operations of Ontario Hydro can be made more efficient, more effective and more responsive to the changing requirements of the Province of Ontario.
- to assist where practicable with implementation of recommendations which are approved while Task Force Hydro remains in being.

- to recommend measures which will help to ensure that the final recommendations will take place after Task Force Hydro has been disbanded.

In assessing means by which these objectives could be achieved Task Force Hydro concluded that the first requirement was a basic study that would examine the *role* of Ontario Hydro and, further, the *place* of Ontario Hydro in the socio-economic-political life of the Province. The objectives of this study therefore are:

- to make recommendations as to the future role of Ontario Hydro.
- to define the place of Ontario Hydro vis-a-vis the Government of Ontario, other jurisdictions and the Ontario community as a whole.
- to recommend appropriate objectives for Ontario Hydro in its recommended role.

Implicit in these recommendations is a conviction that Ontario Hydro must adapt itself to satisfy needs which will have much more to do with broad social demands and expectations than did the needs of the past. They will extend beyond the requirement of providing electrical energy.

SECTION I

A SHORT HISTORY

The Origin

From small beginnings in the first ten years of this century, Ontario Hydro has grown to become the second largest publicly owned utility in North America. Its creation in 1906 was the result of a series of events over a period of decades, the emergence of strong personalities and the particular circumstances of Ontario.

A revision to the Municipal Act of 1858 in 1883 empowered municipalities to operate electric utilities. It was not until the 1890's that the transmission of electrical energy over distances became practicable and a number of municipalities saw great advantage in using hydraulic power rather than coal-fired systems. When in 1902 a strike forced these utilities to substitute coal from Wales costing \$10 a ton for the Pennsylvania product costing \$3.50 a ton which they had been using, it reinforced a feeling of vulnerability.

Personalities destined to lay the foundation for the system of today began to emerge. E. W. B. Snider, a businessman of St. Jacobs and D. B. Detweiler, a salesman from Kitchener (then Berlin) organized a meeting in Kitchener on June 9, 1902. The keynote speaker was Frank Spence, a Toronto Alderman, as far as is known the first man in Ontario to speak out in favour of public power.

Adam Beck, MPP in the Conservative Opposition and Mayor of London, appeared on the scene at a subsequent meeting in Kitchener. He indicated he had "come to learn". From the date of that meeting until his death he was a major force in the creation and development of Ontario Hydro.

Representations made to the Government of Ontario following this meeting resulted in the passage of a bill giving municipalities the legal right to transmit power from Niagara, but with the understanding the Government would accept no financial responsibility. In August, 1903, the Government of Ontario established the first of three commissions concerned with hydro-electric development in the Province.

In the election campaign of 1905 the question of public power was an issue. The Conservatives won the election and Premier James Whitney named Adam Beck to the Cabinet as a Minister without Portfolio with a particular responsibility for policy as it related to electric power. Five months later the Government set up the Hydro-Electric Power Commission

of Enquiry, with Adam Beck as Chairman. Following the report of the Commission, "An Act to Provide for the Transmission of Electric Power to the Municipalities" was introduced in the Legislature in May, 1906 by Adam Beck. The next year it was replaced with The Power Commission Act which, essentially, is the Act under which the Ontario Hydro still operates. In essence it defined the role of the Commission as being a wholesaler of electric power and of the municipalities as the retailers.

The Beck Years

The founding period was highlighted by the leadership and chairmanship of Sir Adam Beck, whose interest never flagged from the time it was aroused in 1903 until his death in 1925. The interval from 1925 to 1940, in spite of the depression of the 1930's, was a period of consolidation and growth which laid the foundation for a major effort during World War II. During the postwar period the rate of expansion accelerated and to an increasing extent Hydro became a major economic presence in Ontario.

In 1921 the Government passed an amendment to The Power Commission Act under which it agreed to pay 50 percent of the cost of all rural primary lines constructed or to be constructed. The Rural Hydro-Electric Distribution Act of 1927 combined this and a subsequent amendment into a single act which was designed to confirm the arrangements for extending power to rural Ontario.

At the time of Beck's death the total investment in Hydro and the associated municipal utilities was \$277 million and reserves and surplus totalled \$47 million. The total number of ultimate customers exceeded 438,000, of which some 36,000 were direct industrial and rural customers of Hydro and about 402,000 were customers of the municipalities. Within its time and place, and considering experience in the other provinces of Canada, this was a major accomplishment, particularly in view of the fact that in the postwar period many of the provinces of Canada have converted their power utilities, at great cost and at the price of severe dislocation in the utilities, from private to public ownership. What has become conventional wisdom throughout Canada in the 1970s was far-sighted and bold action in the first decade of this century in Ontario.

The War Years

In the twenty years following the Beck era — the period to the end of World War II — the major challenge was extension and expansion and the war itself intensified the need: \$28 million was spent on construction over a 2 year period and three new developments were launched. In spite of

heavy and unforeseen demands the structure and organization was able to expand to meet the national crisis.

Demand had moved ahead of available supply by 1946 and by 1948 no fewer than five new hydro-electric developments were under construction or on the drawing boards. Concurrently Hydro built up its skill in the design and construction of thermal plants.

The Thermal Plants

The opening of the Robert H. Saunders Generating Station on the St. Lawrence River in 1958 marked the end of major hydro-electric development in Ontario. From that point forward major expansion to meet escalating demand would have to come from thermal plants.

Uranium emerged as a source of energy. The fact that the energy output from one pound of nuclear generating fuel is equivalent to 21,800 pounds of coal, 1,600 gallons of fuel oil or 283,000 cubic feet of gas, coupled with the fact that Ontario possesses major deposits of uranium, led Hydro to strive for real nuclear sophistication. That this has been achieved is confirmed by the dramatic success of the Pickering nuclear generating station.

During the middle 1950's Ontario Hydro became electrically synchronized with an interconnected grid involving Canadian and United States utilities. Following the 1965 power blackout of northeastern North America, these interconnections were strengthened to improve the level of system reliability.

By 1971 Ontario Hydro had over 23,000 employees and its direct annual wage and salary expenditure totalled \$276 million. During 1971 it placed orders for \$460 million for the procurement of plant, equipment and services, 64 percent of which will be of Canadian origin; and of this 85 percent (\$250 million) will be spent in Ontario. Ignoring any multiplier effects, Hydro's direct impact on the Ontario economy in 1971 for wages and salaries and orders placed for goods and services was \$526 million.

The Achievement

In spite of the need to reassess Hydro in the light of requirements for the decades ahead, the cooperative partnership between Ontario Hydro, the municipalities and the Government of Ontario has been a dramatic success story. One of the most rapid rates of industrialization in the world has been served and facilitated and Ontario residents have been provided with electricity at very low rates compared with other provinces and the

United States without the inconvenience and economic loss experienced through brownouts. At the same time, Ontario Hydro has achieved a reputation among its peers as a world leader. It has been of immeasurable service to the Province of Ontario.

SECTION II

HYDRO AND THE BULK POWER SYSTEM

Traditional Hydro-Government Relations

The Power Commission Act spells out the traditional relationship between Hydro and Government. The Lieutenant-Governor in Council is given wide and over-riding powers. The Provincial Treasurer is given specific responsibility for approving financial advances by the Province. An annual report is required to be presented to the Provincial Secretary. The Minister of Treasury, Economics and Intergovernmental Affairs assesses Commission property. An Ontario Hydro-Electric Advisory Council is provided for under the Act but it has not functioned for many years.

Relationships are legislated but they also evolve. The relationship between Hydro and the Government has adapted to the realities and the personalities of the day. One major element contributing to decision making has been the working relationship between the Premier of Ontario and the Chairman of the Commission. To a considerable degree this has also been true of the Minister responsible for Hydro and the Chairman. Relationships between persons in Government and Hydro have developed at the middle management level. Out of legislative requirements, personalities and personal relationships there has developed a respect within Government for the technical competence of Hydro and on Hydro's part an acceptance of an increasing need for firm policy direction from Government.

Hydro's Mandate

Hydro's traditional mandate has been "power at cost". This has been put into effect through the satisfaction of peak demand at the lowest possible cost consistent with a high standard of reliability, financial soundness and independence.

In fulfilling its mandate to lower unit costs Hydro has sought the achievement of maximum consumption of electricity. A policy of achieving maximum consumption was never made explicit but nevertheless such a policy was in effect. It was implicit in the direct and indirect subsidies and sales promotion programs which have tended to lower costs and in turn encourage consumption. The policy has served Ontario well: until four or five years ago the unit real cost of power was steadily reduced as a result of the increase in consumption.

Future Demand

Ontario Hydro has virtually doubled sales every decade and since the early 1920's sales have increased by a multiple of 25. Except for a few occasions Hydro's dependable peak capacity has exceeded the peak demands for power.

Hydro forecasts a growth in demand for electrical energy in Ontario from a 1972 level of 12,970 to 46,000 megawatts by 1991. This assumes a 7 percent annual increase in demand over the period for which the projection is made and means that generation capacity will have to be doubled over the next decade and doubled again over the decade following. But, as the conservationists have argued, such exponential growth rates, in the long term, are unrealistic and unacceptable. Hydro may be recognizing this in its tentative conclusion that in the 1990's the growth rate of annual demand may decline to 6 per cent.

System Configuration

Until the 1950's almost all generation was hydraulic. Thermal generation on a major scale was introduced to the system in 1951 and by 1971 over 50 percent of the capacity and 38 percent of the power output was thermal. Slightly under 1 percent was nuclear (Figure 1). It has been forecast that by 1990, forty-four percent of the electricity generated in the Province will come from uranium, 44 percent from fossil fuels and only 12 percent from hydraulic sources. The current performance of the Pickering nuclear generating station augurs well for Ontario Hydro's nuclear programme and supports the possibility of even greater reliance on nuclear generation as opposed to fossil-fuelled generation by 1990.

The dramatic change in system configuration of the past two decades will continue into the next two.

Bulk Power Costs and Rates

Until the late 1960's, as a result of technological developments and economies of scale, Ontario Hydro's wholesale cost of power fell in terms of constant dollars. But since 1969 bulk power costs have risen dramatically with fuel costs and rising interest rates being the principal contributing factors. Escalating demand, the high cost of frontier area exploration and high transportation costs will continue to increase the price of fossil fuels. Nuclear sources also will be costly. The cost trends in generation are matched by a similar trend in transmission, and rising costs for environmental protection are just beginning to be fully experienced. As a

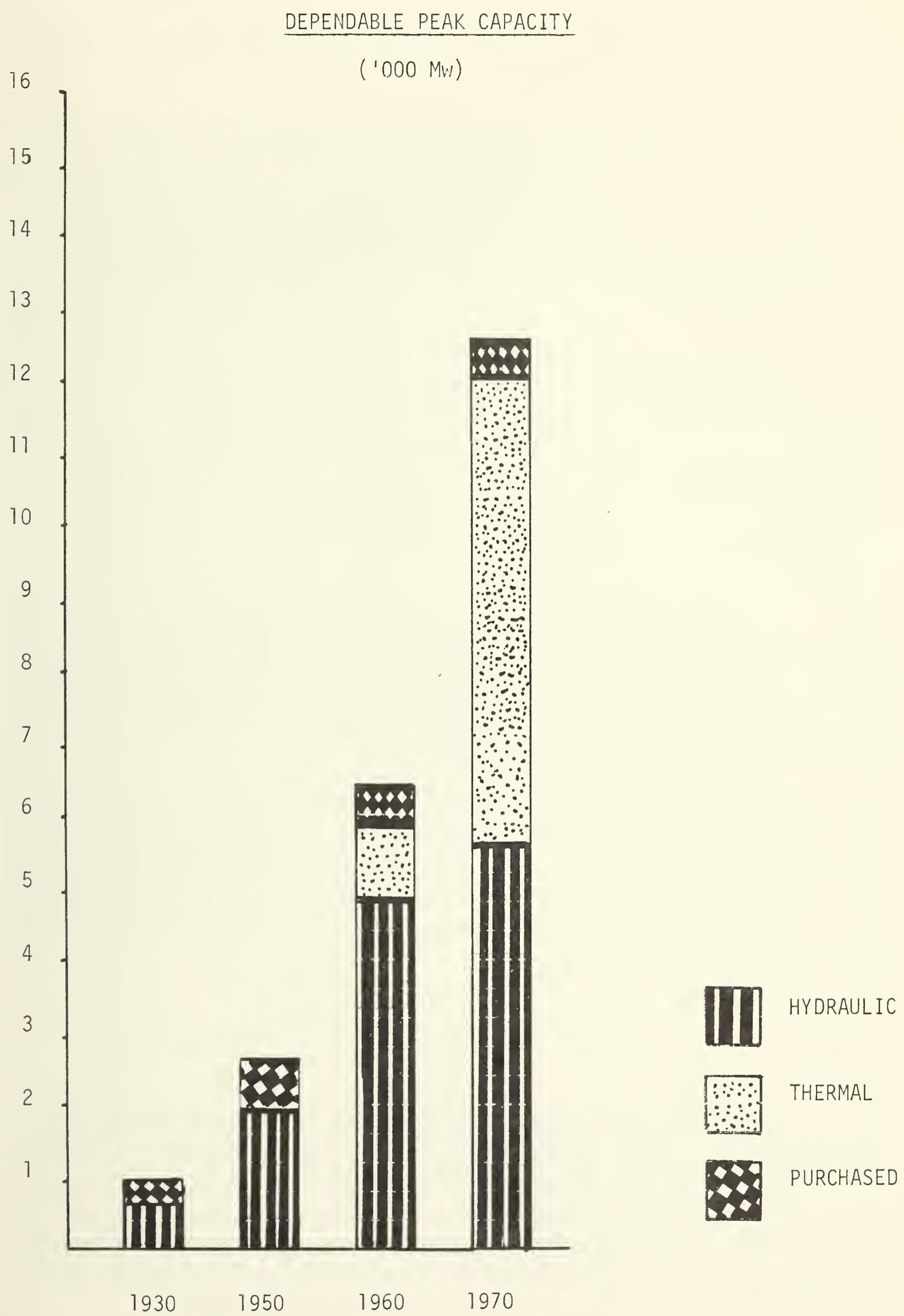


Figure 1

consequence the projected 1980 cost of bulk power of \$95 per kilowatt will rise to \$122 by 1990 compared with a 1972 cost of \$65, all costs being in current dollars.

Ontario residential consumers enjoy rates for electrical energy well below most other provinces and much lower than the averages in the United States and the United Kingdom. Assuming an average monthly consumption of 750 kilowatt-hours the following table sets forth the percentage by which residential power bills in other jurisdictions differed from bills in Ontario.

United States		Canada	
As of Jan. 1, 1970		As of Dec. 31, 1970	
Average	+ 63%	Average	+ 13%
New York State	+ 99%	Manitoba	- 3%
Michigan	+ 41%	British Columbia	+ 47%
California	+ 51%	Quebec	+ 15%
Tennessee	+ 8%		

It is much more difficult to make valid comparisons of commercial and industrial rates among utilities but it is probable that Ontario Hydro's rates would be relatively less favourable, particularly for the larger industrial concerns, than for residential customers. This matter will be examined in a further report of the Task Force.

There were no general rate increases in Ontario between 1954 and 1967 but since 1967 wholesale rates to municipalities have been increased each year. The latest increase of 8 percent became effective on July 1, 1972. As revealed in Figure 2, residential retail rates have recently begun to increase in parallel with the consumer price index. Future increases appear to be inevitable.

Marketing

There has been strong reaction against Hydro's marketing stance. Advertising and other incentive programs have been employed to promote the use of space and water heating by electricity. This is popularly associated with the burning of natural gas or oil, known reserves of which are limited, or the combustion of coal with its attendant air pollution. Hydro's slogan to "live better electrically" is at odds with the environmentalists' admonition to conserve scarce resources and to reduce pollution.



The marketing procedures that are most appropriate can alter over time. Environmentalists often suggest that use of electricity should not be promoted for direct heat applications such as water heating and space heating because of the higher efficiency of direct burning of fossil fuels at point of utilization as compared to converting fuels to heat via the generation of electricity. Since the latter method uses more fuel to create electric heat, consumption of scarce fossil-fuel resources is increased and there is a presumption of a higher degree of pollution than if the source fuel had been used directly. But as Hydro turns increasingly to nuclear power the point may be reached where, measured in terms of minimum pollution as well as the conserving of fossil fuels, the public interest will be served by the active promotion of space and water heating by electricity.

Further, marketing strategy for electricity, as for most commercial products, must attempt to relate sales and productive capacity for maximum efficiency. It is a legitimate objective for Hydro's marketing program to promote the most efficient use of its facilities.

Energy policy and environmental policy, as well as system efficiency, bear on marketing strategy. Therefore provincial energy and environmental guidelines must be promulgated before Hydro can define its marketing policy.

The Future

It is clear that generation and marketing of electric power by Ontario Hydro in the next two decades cannot be expected to be a straight line extension of the practices and experience of the past. New strategies and fresh approaches will be required.

SECTION III

THE MUNICIPAL UTILITIES

The Distribution System

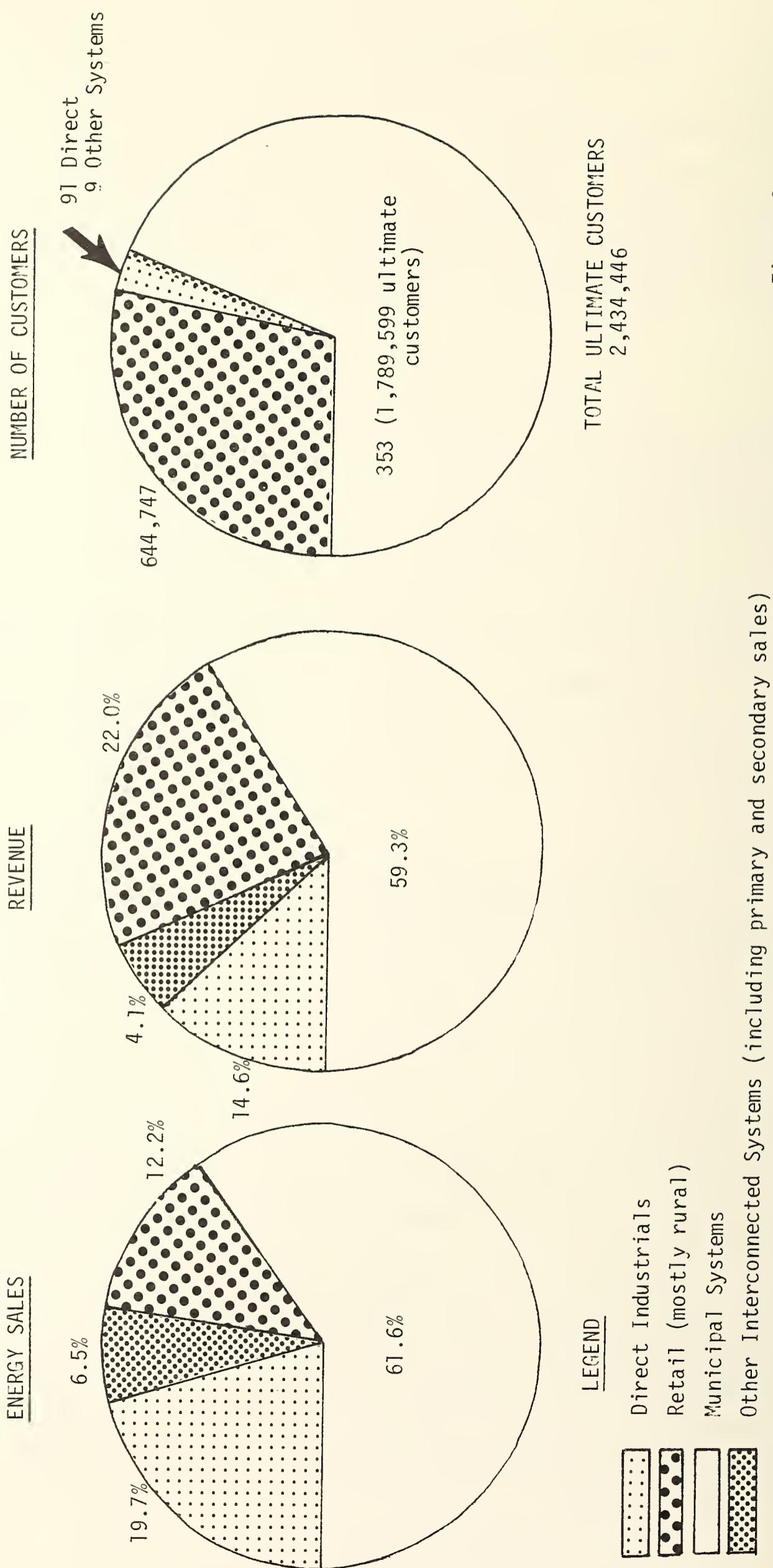
Ontario Hydro, municipal utilities and private utilities in 1971 distributed electrical energy to almost 2,440,000 customers in Ontario. Figure 3 illustrates the contribution made to energy sales and revenues during that year by Hydro's four classes of customers.

Ontario Hydro: Hydro provided power directly to 91 major industrial users and 9 interconnected systems (including private utilities) each of which had loads in excess of 5,000 kilowatts. These direct customers were included in what Hydro terms the "power district". Also included were some 645,000 rural retail customers. The power district encompasses those areas of the Province which have not been incorporated into municipalities with self contained electric utilities. As a consequence, it comprises some of the most uneconomic areas, and subscribers tend to pay the highest rates.

Ontario Hydro maintains regional offices with a combined staff of 6,800. These offices provide services to customers in the power district and cooperate closely with the municipal utilities and local government in matters having to do with the distribution and marketing of electrical energy.

Municipal Utilities: The majority of customers, some 1.8 million, are served by 353 municipal utilities operating the retail systems in incorporated municipalities in the Province. The larger municipal utilities are relatively autonomous in terms of such management concerns as labour contracts, marketing policies, quality and conditions of service. The smaller systems, however, receive varying degrees of assistance from Hydro. All are subject to regulation by Hydro for such matters as retail rates, financial and accounting practices and commissioners' salaries. The municipal councils are required to obtain the approval of the Ontario Municipal Board before issuing debentures for the capital purposes of the municipal utilities.

There is a wide variation in operating costs and standards of service among the municipal systems. Despite the essential uniformity of bulk power costs throughout the Province, the average revenue per kilowatt hour received from residential customers in major centers varied in 1971 from 1.07¢ in Ottawa to 1.73¢ in Windsor. The structure of rates also varied. Hydro does, however, encourage uniformity through exercise of its right of rate review.



The utilities vary in size from Toronto Hydro with 217,400 customers, which during 1971 sold in excess of 5,300 million kilowatt hours, to Priceville in Grey County with 86 customers which during the same interval sold only 441,500 kilowatt hours. Of the 353 municipal utilities 57 percent (202) serve municipalities with 1,000 customers or less, 24 percent (84) serve 1,000 to 3,000 and only 2 percent (8) serve centres with over 50,000 customers. The majority of the utilities call on Hydro for some assistance and approximately 10 percent depend entirely on Hydro to operate their systems.

The total assets of the municipal utilities, not including their equity in Ontario Hydro, amounted to \$808 million in 1971 or 13.8 percent of total system assets (Figure 4).

Private Utilities: Canadian Niagara Power, a subsidiary of Niagara Mohawk, distributes in Fort Erie; Cornwall Street Railway Light and Power and St. Lawrence Power distribute in Cornwall; Gananoque Heat, Light and Power supplies Gananoque, and Great Lakes Power serves Sault Ste. Marie and part of the Algoma district. There are as well a handful of smaller private systems, mostly owned by large industries, which generate power for their own purposes and distribute the surplus to adjacent townsites. The private utilities are not subject to control by Ontario Hydro, but where Hydro is the regular supplier of any portion of their power requirements the contract provides for the right of rate review by Hydro. In practice, the private utilities tend to keep their rates at the level of adjacent rural areas or municipalities.

Return on Equity

The municipal utilities contribute to the retirement of Ontario Hydro's debt. Their contributions are included in the cost of bulk power, and during the 62 years of Hydro's operation have amounted to over \$577 million. This is carried on the books of Ontario Hydro and each utility is shown to have an "equity in Ontario Hydro" the amount of which varies according to the size of the utility and the length of time it has been a part of the system.

Beginning in 1951, municipal utilities which had contributed to the retirement of Hydro's debt for the full period of the sinking fund program (40 years) began to receive what was called "sinking fund relief." By 1965, however, this scheme had become cumbersome and it was replaced in 1966 with a plan whereby each utility received annually a "return on equity" equal to four percent of its accumulated equity at the previous year end. The total cost of the return is a charge on the bulk power

TOTAL SYSTEM ASSETS - 1971

(Including Ontario Hydro and
the Municipal Utilities)

\$5,871.7 million

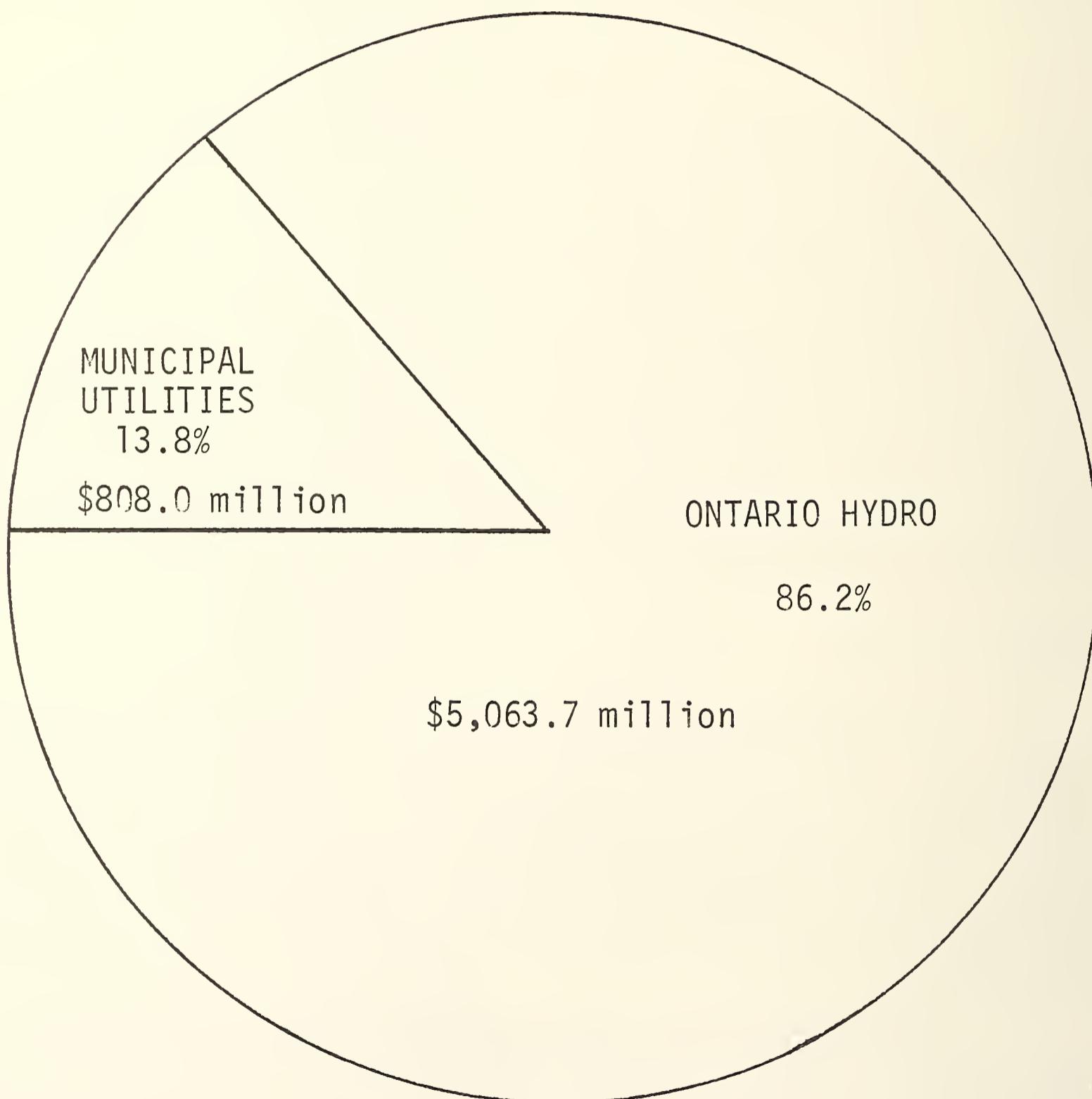


Figure 4

rate and is therefore recovered from each utility in proportion to its power demand. Concern focuses on the contribution made by this "equity exchange" to variations in retail rates. Older established municipalities tend to gain on the exchange at the expense of the newer, faster growing ones. The equity process causes variations of over 10.5 percent in the average retail cost of power.

The Ontario Municipal Electric Association

The O.M.E.A. was formed in 1912 with the membership composed of the Commissioners of the municipal utilities. The Association is organized into nine Districts and has a provincial headquarters. The objectives of O.M.E.A. include the following:

- to take united action in the establishment of uniform standards and procedures;
- to work with Ontario Hydro in promoting the electrical development of the Province;
- to suggest legislation advantageous to the hydro-electric enterprise of the Province;
- to prevent any encroachment on the rights of the municipalities.

The O.M.E.A. feels that certain safeguards are necessary to ensure electrical service that is reasonably secure and responsive to the needs of its customers:

- recognition of municipal (as distinct from provincial) ownership of the provincial bulk power system, with each municipality's "equity" being proportional to its accumulated contribution toward the retirement of Hydro's debt;
- recognition that Ontario Hydro's role is that of a trustee that manages the system for the benefit of its owner-customers, the municipal electric utilities;
- the perpetuation of locally elected commissions operating independently of municipal councils;
- the continued existence of the municipal co-operatives.

The role of the Province, in the view of O.M.E.A., is to act as controller of a monopoly, to be auditor and guarantor, to be the constitutional trustee for "unorganized rural sections of Ontario served by Ontario Hydro" and to act as trustee for the municipalities which are "creatures of the Province".

These safeguards are regarded by O.M.E.A. as being important to avoid undue expansion of an "already large" public utility, and, through the provision of elected Commissioners, to provide checks and balances which contribute to democratic control.

The Government of Ontario has from time to time recognized a relationship of the O.M.E.A. to Ontario Hydro by appointing as Commissioners of Ontario Hydro persons who have been senior officers of the Association.

Reorganization of Municipal Government

The Government of Ontario is committed to the restructuring of municipal governments into larger units. New municipalities will be delineated to develop a sense of community based on sociological characteristics, economics, geography and history. They will be large enough so that local responsibilities can be performed efficiently through the achievement of economies of scale. Boundaries can be used by other institutions in the administration of their programs.

- New municipalities have been reorganized in six areas — Muskoka, Niagara, Ottawa-Carleton, York, Thunder Bay and Toronto — encompassing roughly 40 percent of the population of the Province.
- Three more new municipalities are in the process of formation at Timmins, Kitchener-Waterloo and Sudbury.
- By 1974 approximately 60 percent of the total population of the Province is expected to be served by new municipal governments.
- By 1980-85 urban Ontario could be fully covered and within the following ten to fifteen years municipal reorganization could be extended across the Province.
- A total of 25 to 35 new municipal government units are envisaged for southern Ontario.

Each new municipality will ordinarily encompass one or more existing municipalities, each now having its own municipal utility or being served by Hydro's rural retail system.

The Need For Rationalization

It is generally acknowledged that there are too many utilities and that on economic and administrative grounds some rationalization is desirable.

- Differences exist in service policy, rates and standards of service, confusing customers who are located at boundaries or who move from one jurisdiction to another.
- When changes are required in municipal boundaries because of annexations, the power utility's service area has to be modified because municipal utilities are identified by municipal boundaries. However, these transfers of assets from the power district to the municipal utilities tend to be complicated and to involve considerable time and expense to reallocate system facilities and to determine and negotiate sale prices.
- Publicity relating to rates causes confusion. The public may be told, for example, that Ontario Hydro rates will be increased; yet their municipal utility may not increase rates at the same time, or by the same percentage.
- Historical practices developed within the delivery system have profound external effects. Probably the best example of this is "return on equity". This affects customers differently depending upon whether or not they are located in areas served by relatively new and fast-growing utilities. It biases the rates and encourages industrial customers to try to move from municipal utilities to the power district, or vice-versa.
- Attempts to rationalize the utilities lying in areas now served by new municipal governments have so far been thwarted.

The emergence of new municipal governments will have a profound effect on the pattern established in any future rationalization of the electrical distribution system in the Province. Such rationalization should take into account the needs of rural customers, those served by the private utilities and Hydro's direct industrial customers whose interests are not served by O.M.E.A. Any rationalization plan also should include a detailed study of the role to be played by the private utilities and their relationship to Ontario Hydro.

SECTION IV

HYDRO AND THE CITIZEN

The Changing Social Environment

Attitudinal change is very much a part of modern life. Many people are rejecting or questioning traditional authority and the more radical among them regard established institutions as vehicles of depersonalization and exploitation. Many are disenchanted with the democratic process and, at a minimum, feel that if change is to be achieved democracy must be re-enforced by direct action and demonstration. There is a deep scepticism of experts and professionals who prescribe for society. There is active suspicion of corporate enterprise.

That citizens can close ranks very rapidly and very effectively is attested by the rapid formation of the "Coalition of Concerned Citizens", organized to protest the proposed location of Hydro's 500-kilovolt transmission line from Nanticoke to Pickering, and the "People or Planes" committee organized to block the proposed new airport at Pickering. Whether invited or not, citizens will continue to seek direct involvement in decision making. Hydro, already the target of the "Coalition of Concerned Citizens", must expect that its decisions will periodically attract the attention of other citizens who are equally concerned.

Citizen Participation

While the concept of direct citizen involvement can be objected to, such involvement can only be expected to continue and increase. It is fair to ask if it is effective and if the results are positive. In Ontario, there are some interesting examples:

- The first Trefann Court Urban Renewal scheme came under heavy fire from local residents who fought against the demolition of their homes. This led to the establishment of a working committee made up of citizens and politicians; a revised scheme, produced by this committee, satisfied many of the citizens' concerns and was able to gain the approval of the Toronto Planning Board.
- In May, 1971, a group of ratepayers and local service organizations submitted a plan for the Kensington Community School. The adoption of the plan set a pattern of citizen involvement which has resulted in a change in the policy of the Toronto Board of Education.

A power utility in the United States had an equally interesting experience:

- In the late 1960's the Northern States Power Company, a private utility in Minnesota, became convinced that a confrontation that had developed between it and citizen groups was more a product of the method by which decisions regarding the siting of generation plants had been reached than of the actual sites chosen. When the time came to construct a new thermal station the company sponsored the formation of a citizens' task force involving the groups that had fought them most vigorously as well as other interested groups. The utility provided full information and after twelve weeks of study and consideration the task force ranked four possible sites in their order of preference. The company accepted the recommendation and approval of the state government was subsequently gained. On the basis of this success the utility and the citizen task force have agreed to continue to work together and recommendations have come forward to the company on marketing policy and emission control standards. The company has not bound itself to accept task force recommendations but, in practice, has found that the examinations are complete and the recommendations well documented and supported. As a consequence the company is gaining more ready acceptance of its expansion plans, the interests of the community are being served and confrontation and discord is being avoided.

Not all instances of citizen participation have been as productive as the foregoing. But there is now enough evidence of positive results to warrant a serious effort to develop techniques for involving the citizenry to an increasing extent.

Hydro's Traditional Relationship with the Public

Hydro generally has established over the years a good relationship with its customers and a favourable overall public image. Obviously, however, a public utility dealing with a very large number of customers, even if only every two months through its power bills, is going to be subject to some criticism. The briefs submitted to Task Force Hydro confirm that certain citizens and corporations perceive Hydro as being remote, impersonal, monolithic, and indifferent.

Some resentment clearly stems from Hydro's quasi-judicial role, or its regulatory role. Hydro has the responsibility for inspecting all electrical installations in Ontario and thereby to enforce regulations that Hydro itself, by the authority given it in the Power Commission Act, has laid down.

The Commission is also empowered to set wholesale rates, and to approve the retail rates charged by the distribution utilities. Rate appeals may be heard by the Commission or by any of its members, but from their decisions there is no further recourse.

Furthermore, those who feel they have not received fair treatment at the hands of the Commission in the matter of rates, or those who feel aggrieved for other reasons and wish to appeal to the courts, can find their way blocked because no legal action can be taken against the Commission or any member of the Commission without the consent of the Minister of Justice or the Attorney General. It should be noted, however, that the Minister of Justice or the Attorney General has seldom, if ever, withheld consent.

Not all complaints come from individuals. A corporation that is a major customer of Ontario Hydro and that must be regarded as being businesslike and rational wrote to Task Force Hydro as follows:

“We find that we enjoy little response to our protests against Hydro decisions. It is not that we feel Hydro’s response to our protests must always be favourable; rather we feel frustrated at what we feel to be the lack of consideration of our problems. Unilateral decisions on the part of Hydro which are excessively costly to a large segment of the industry currently must be accepted without an opportunity to exercise effective recourse.”

Hydro reports that it has expended considerable effort to reconcile this situation but it seems there is a need for a fresh approach in the handling of this type of complaint.

Future Development of Hydro-Citizen Relationships

In 1951 the Hydro Chairman, Robert Saunders, established an Advisory Council. It had met only a few times at the time of his death in 1955. Saunders’ plan to gain the detached advice of citizens took place well before the current concern with citizen involvement; it may well have been premature and, in any event, the Advisory Council has not met since Saunders’ death.

Looking to the future, there will probably continue to be two types of criticism of Hydro: a) those related to the problems of customers including rates, standards of service and the like, or from suppliers who may be affected by Hydro’s purchasing policy or tendering practices; and, b) those involving problems of a more general and societal nature, such as

environmental impact, or the location of generating facilities and other such concerns.

The first type of criticism might be dealt with by adopting a method which has been used successfully by large Canadian corporations. The procedure is to create a special customer relations department to review customer problems which have not been resolved or satisfied (in the customer's opinion) by the conventional line organization.

If such a group were established in Hydro, one would envisage a senior person, appointed by and answerable to the Commission, with the authority to reach into every corner of the delivery system and determine the specifics of any case in order to form a judgment as to whether or not a complaint is justified. The amount of authority given to the individual in dealing with problems and grievances would have to be defined by the Commission. In the commercial corporations cited, the practice is to give authority to resolve any issue within the framework of company policy and in the case of relatively minor issues where it is felt an injustice is being done, to waive company policy. On major issues, recommendations may be made that company policy be amended.

With respect to the problems associated with environmental impact or the location of system facilities, it is noted that Hydro has already taken positive steps to involve citizens in the planning and location of a 500-kilovolt line from Pickering to Lennox. Meetings are being held with various citizens' groups to provide them with full information and to seek their advice before a final decision is made on the location of the line. To date, the program does not include direct citizen participation in decision making.

The recent naming of the one-man tribunal to deal with the location of the 500-kilovolt line from Pickering to Nanticoke on which various citizens' groups felt that there was not the type of involvement indicated above, is another example of how to deal with this type of criticism. Tribunals provide the opportunity for citizens to submit briefs and usually to appear and be heard, but the danger is that they become very formal Boards of Enquiry and essentially a confrontational arena which tends to proceed along legalistic rather than discussion lines. The advantages of a tribunal include the reduced danger of a deadlock, the prompt delivery of a decision, and the relative simplicity of the procedure as compared with the deeper involvement of scores or hundreds of vocal citizens.

One would have to conclude, however, that the trend is towards more direct involvement of citizens than through the tribunal medium.

Conclusion

Task Force Hydro is of the view that Hydro cannot fulfil its total obligation to the public simply by meeting demand for electrical power at the lowest feasible cost. The trends in society suggest that even this limited objective may be difficult to accomplish if a means is not found for citizen involvement from the early stages of the planning process for generation and transmission facilities and extending to active participation in decisions as to location and construction.

We urge that the efforts now underway increasingly to involve the public in Hydro affairs be continued. We urge this while recognizing that the procedures used will produce little in the way of positive results in the absence of a widespread commitment to the principles involved and a response to the changing social environment by a majority of those responsible for Hydro's operations.

Finally, Task Force Hydro feels that Hydro's quasi-judicial role may be an impediment to the establishment of better customer and citizen relations.

In its future reports on specific topic areas the Task Force will be giving further thought to the important question of citizen involvement.

SECTION V

HYDRO AND THE PROVINCIAL GOVERNMENT

A Delivery Agency of Government

The Committee on Government Productivity sought a formula for assuring productive relationships between various public corporations, commissions, agencies and the Government. It was concluded that there should be a distinction between policy-making and program delivery functions. The ministries would focus on policy and the delivery agencies, organizationally distinct from the ministries but responsive to policy, would focus on delivery.

According to C.O.G.P.'s definition, Ontario Hydro is a delivery agency. Task Force Hydro has accepted this concept and has framed this report and its recommendations in this context.

Policy Issues

A once-and-for-all definition of the areas of primary Hydro/Government interaction is obviously impossible. Relative importances alter with time and circumstances and the specific needs of Hydro alter with technological change and the ease or difficulty of meeting the demands of Ontario for electrical energy. Policy will alter with changes in the economic and social needs of the community.

Nonetheless in studying the past relationships of Hydro and the Ontario Government and anticipating how these might develop in the future, Task Force Hydro has concluded that there are certain policy areas which will engage the particular joint attention of Government and Hydro. These policy areas are:

- Power pricing
- Return on investment
- Stability of capital markets
- Discriminatory pricing
- Energy policy
- Environmental policy
- Exploitation of technology
- Regional development
- Productivity and efficiency
- Capital investment timing.

Power Pricing

We shall use the term “aggregate rate” to refer to the overall level of tariffs or prices at which power is sold. As with virtually all other commodities, the aggregate rate or selling price is normally expected to influence the amount purchased.

In the case of electricity, there is a dearth of information concerning price-demand relationships and there is consequently some disagreement as to the degree to which use of electricity responds to an increase or decrease in its price. A recent U.S. study did, however, conclude that residential demand (just under one quarter of consumption in Ontario) was quite responsive to price changes. It found that after a time lapse which permitted adjustments in number of customers and sales per customer, a 10 percent increase in constant dollar price had induced approximately a 12 percent decrease in consumption. The study also found that the proportion of income spent on electricity decreases as income increases, meaning that an upward adjustment in the price of electricity has a greater relative impact on low income families than on high income families.

A general conclusion is that any policy which increases the cost, and therefore the price, of electricity will be at least directionally effective in reducing residential consumption in the long run. Although, the burden will fall more heavily on low income groups, this “problem” – the regressive effect of higher electricity prices on income distribution – is a general one shared by a wide range of goods loosely classified as necessities, such as food. The solution is to be found not in departures from cost-based power rates, but in the structure of the income tax which is designed specifically to mitigate such inequalities.

Ontario Hydro’s historically low aggregate electricity rates can be assumed to have acted as an important stimulus to the economic growth of the Province. But there is some evidence that Hydro has priced electricity below its true socio-economic cost. Until recently, environmental costs have been excluded. The Provincial Government’s subsidization of rural electrification has tended further to underpin “cheap power”. More recently federal policies, including subsidized pipelines, restrictions on gas exports and investment in nuclear programs have been a factor in keeping aggregate rates down. Accepting that Ontario is now a mature economy in terms of its use of electrical energy, the case for a general subsidization of power rates is no longer supportable.

The fundamental relationship between aggregate rates, economic development and the standard of living of the people clearly makes power pricing a most important policy issue for Government and Hydro.

Return on Investment

A privately owned business must, over the long term, earn a return on the capital it employs comparable to that which such capital could earn elsewhere. Although the situation is not identical in a publicly owned corporation there is a valid economic argument, which will be presented in a subsequent Task Force Hydro report, in support of Hydro's earning a return on the capital it employs comparable to that earned by similar utilities and by other firms dealing in competitive energy resources. This it is not doing. Figure 5 reveals that Hydro's pre-tax net operating return has been less in recent years than that of other major Canadian public and investor-owned utilities.

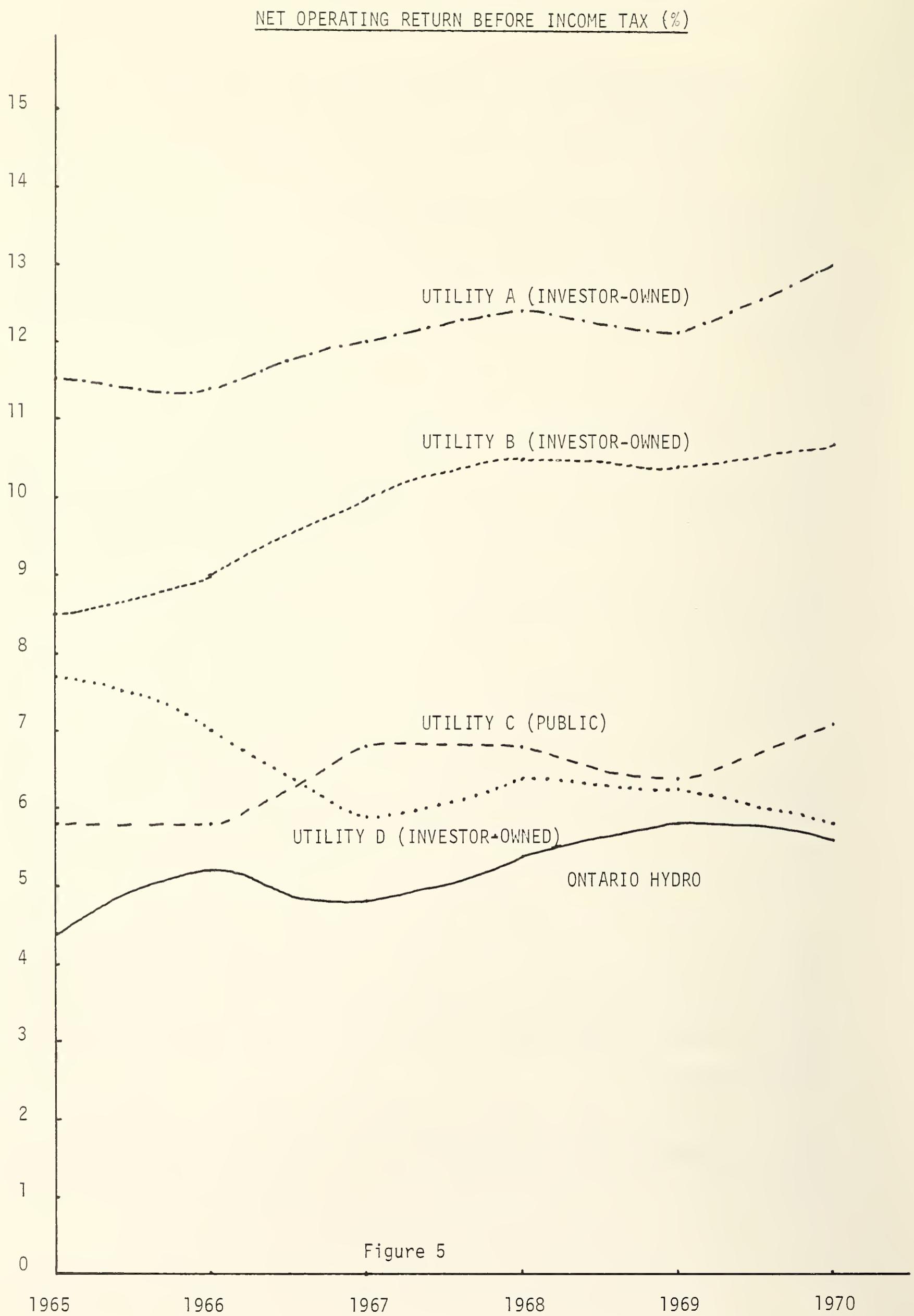
A failure to earn an economically appropriate rate of return as a consequence of keeping the price of electricity too low is likely in the long term to lead to excessive use of electrical energy and so to resource misallocation, as well as to financing difficulties. On the other hand an increase in prices sufficient to generate an economically appropriate rate of return would lead to an improved allocation of resources in the energy sector of the economy, and would reduce the requirements for capital from external sources.

Stability of Capital Markets

Ontario Hydro is capital intensive and its demands upon the capital market are increasing rapidly. In 1956 it incurred a net new debt of \$209 million, the largest annual accretion during the 1950's. In 1969 the net new debt reached \$300 million. It continues to climb. It is estimated that it will be \$650 million by 1975 and in excess of \$1 billion by 1981.

In the 1950's Ontario Hydro absorbed some 2.6% of the total domestic savings available in Canada. The requirement declined to 1.1% of a larger total in the 1960's. It is estimated that Hydro will require at least 2.0% of the domestic savings available during the 1970's and could require a higher percentage in the 1980's if the trend is toward a greater emphasis on nuclear generation.

For the past two decades the Government of Ontario has not made major demands on the capital market. This could alter. Certainly the entry of Hydro into this market must be co-ordinated with demands made by the Province of Ontario and with other major borrowers.



Discriminatory Pricing

Discriminatory pricing refers to the policy of charging differing prices to various classes of customers, among geographic regions or among types of load, where such price differences do not reflect corresponding variances in the cost of supplying the electricity.

A recent case in point relates to the electrification of remote communities in Northern Ontario. A special Provincial Government Task Force on Northern Electrification recommended that the Province bear the capital cost of the required diesel-electric facilities in certain remote communities. However, the recommendation stipulated that rates should be set at a level 45 percent below Hydro's estimate of what would be required for the system to be self sustaining and that the deficit would be a charge to the bulk power system and therefore be borne by all power users. This is an example of discriminatory pricing.

"Return on equity", described earlier, is one of the major contributors to variations in the retail rates of the various electricity supply authorities in Ontario. While the practice is not usually considered to represent price discrimination, the effect — variations in retail rates not associated with true cost differences — is the same.

Uniformity of bulk power prices throughout the Province to customers on line supply has been Hydro policy. This policy is defensible but it could be argued that it is discriminatory in cases where there are differences in the cost of supplying power. It could also be argued that it prevents Hydro rates from being an instrument for regional development.

Discriminatory pricing is sometimes defended on the grounds that a public utility has an obligation to maintain service in sparsely settled areas at "reasonable" rates or on the basis that it is necessary to compete with alternative energy sources. On economic grounds the first type of price discrimination may be questioned because of the internal subsidies it requires. And discrimination to meet competition is justified only if the marginal cost of accepting the additional business is less than the average system cost without it. The existence of such a situation will be increasingly improbable in future years if Hydro's assessment of cost trends is accurate.

Energy Policy

Energy policy is both a federal and a provincial responsibility. It has an important bearing on a number of related areas such as national security, economic and regional development, employment support in extractive industries, science policy and environmental policy.

For Ontario, energy policy must inevitably focus on energy consumption and the availability and end use of fuels, virtually all of which, with the exception of uranium and lignite, must be imported. For Hydro the energy policy of both the Federal and Provincial Governments may place restrictions on fuel use and the type of new generating capacity. Thus energy policy can have important effects on the cost of power and, therefore, on aggregate rates.

Hydro is a major consumer of primary energy resources. As shown in Figure 6, 21.5% of consumption went into the production of electricity in 1970. This included 2.6% for nuclear energy and purchased power. It has been estimated that 39% of primary energy will be consumed in the production of electricity in 1990.

Hydro, in spite of greater dependence on uranium, will take a larger share of the available fossil fuels. In 1960 Hydro accounted for only 1% of fossil fuel consumed in Ontario but by 1970 Hydro's share had risen to 12%, and by 1980 it is estimated that 25% of the available supply will be used to generate electricity.

In the short term it appears that Hydro's fuel requirements can be met, especially if the recent success with the Pickering Generating Station can be fully sustained. But in the long term the outlook is less certain. Perhaps more efficient utilization of coal resources will provide part of the answer.

Irrespective of the outcome, exponential growth rates in energy demand will result in increasing pressure for measures to control the use of non-renewable fuels and to seek more efficient use of energy. Although the Government of Ontario must take the lead, Hydro must play an active and creative role in assisting to shape Ontario's future energy policy.

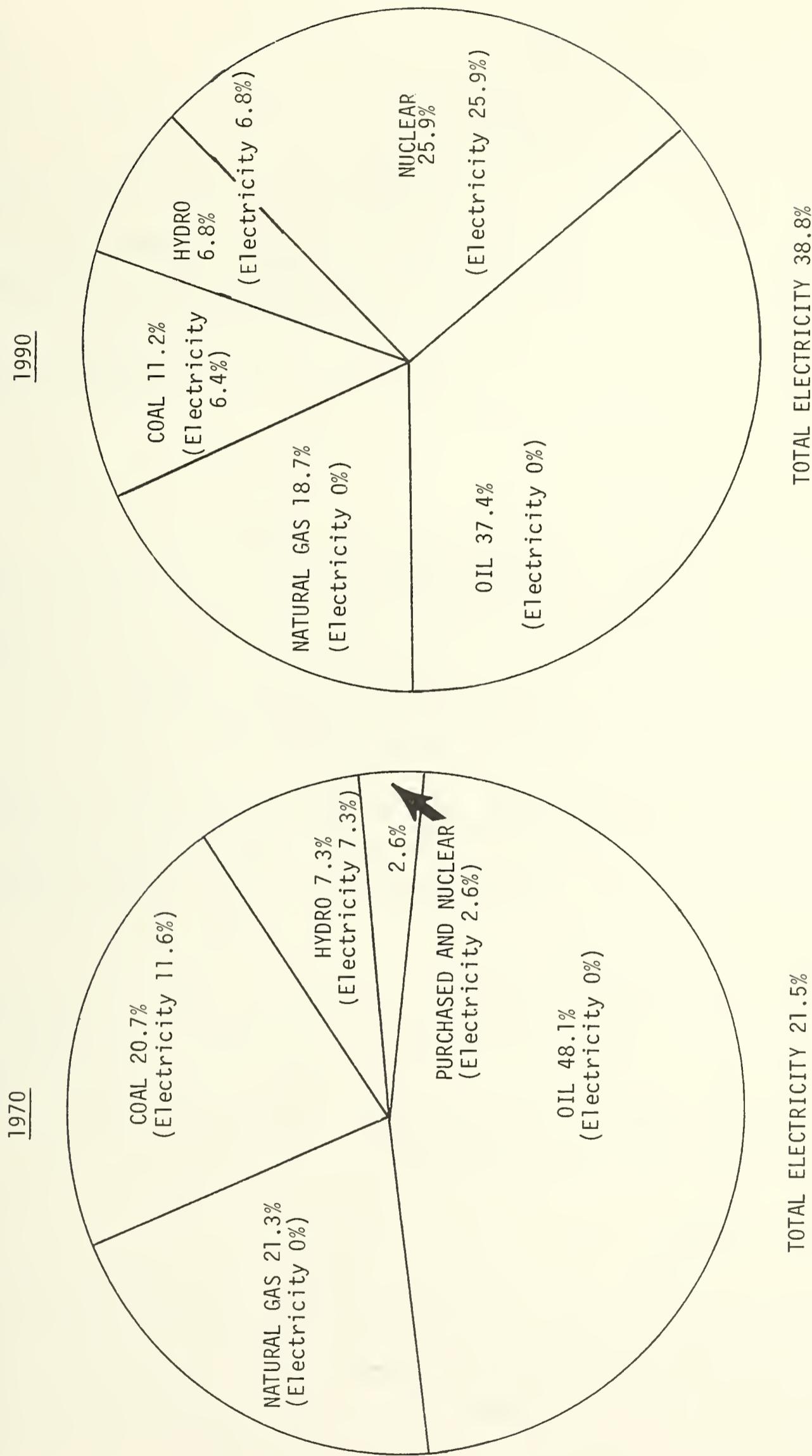
Environmental Policy

Environmental policy, like energy policy, is increasingly claiming the attention of the policy makers. Because Hydro's environmental impact is great, policy in this area has become a most important consideration.

Stack emissions from fossil-fuel plants and discharges of cooling water from thermal plants are problems of particular concern. The public objection to the use of land for generating and transmission facilities and to the alteration of natural waterways for hydro-electric development is becoming more insistent. Aesthetic considerations call for more thoughtful design and location of generating plants and transmission lines.

Figure 6

PRIMARY ENERGY CONSUMPTION BY SOURCE
AS PERCENT OF TOTAL CONSUMPTION, ONTARIO, 1970 AND 1990



Source: Ontario Energy Board, Energy in Ontario, 1970.

Source: National Energy Board, Energy Supply and Demand in Canada and Export Demand for Energy, 1966-1990, 1969. Study predates recent Hydro decisions to fuel certain stations with oil and natural gas.

In some ways Hydro can be regarded as any industry required to comply with environmental standards, but Hydro is also a special case. The cost of power increases as environmental standards are met and this might be in conflict with other aspects of Government policy. In some circumstances a compromise solution, which could only be arrived at with Government approval, would be necessary.

Environmental policy is hampered by a lack of dependable information, which means that fully adequate answers to many important questions are not available. There is a continuing need for research into such areas as thermal pollution and the effective utilization of waste heat.

Environmental policy is an area in which Hydro and Government will collaborate more or less continuously.

Exploitation of Technology

Ontario Hydro is the largest power utility in Canada and it has developed skills and experience not found elsewhere in the country. It has the largest and one of the best engineering design units in Canada, it has extensive experience in the design and construction of thermal generating plants and it has major project management capability. It has a sound base in nuclear technology and proprietary computer programs.

Hydro has demonstrated a marked ability to exploit technology internally to meet its own ends, but there also exists an opportunity for Hydro to lend support to the upgrading of project management and technical capability of industry in Ontario and Canada. The benefit and experience gained in other industries also can be applied within Hydro.

Therefore, Hydro should be encouraged to explore ways and means to exploit its technological expertise externally. This might be accomplished through joint ventures to design and construct major facilities or through greater emphasis on contracting out research and development programs and engineering work to the private sector.

Regional Development

Ontario Hydro can reinforce or retard Provincial government objectives with respect to regional development. The provision of electricity can encourage the development of a remote area. The siting of generating stations, regional offices and other Hydro facilities affect employment patterns. Discriminatory pricing can favour new industry or particular industries or customer groups.

The proposal mentioned earlier to subsidize the diesel electrification of remote communities in Northern Ontario is an example of the impact Hydro operations can have on regional development. The recommendation called for a 100 percent capital subsidy by the Government, and the absorption by Hydro of 55 per cent of the operating costs. Other cases have been observed where Hydro offices have been perpetuated or office location influenced by the policy attitudes or other concerns of Government.

In these examples additional costs to the Hydro system are involved which are, in turn, reflected in the aggregate rate. Such situations involve some compromise with maximum Hydro efficiency. This implies a policy decision in which the interests of both Government and Hydro must be taken into account.

Productivity and Efficiency

A private corporation, as distinct from a public body, has available to it several ways in which productivity and efficiency can be measured: after-tax profit as a percentage of sales, earnings per share or return on equity.

A publicly owned utility is assumed to exist to provide maximum benefit to the public welfare. Since it lacks the specific profit-oriented objective of private corporations it is much more difficult to measure the productivity and efficiency of a publicly owned enterprise. With no simple means of measurement, it is easy to assume that large public utilities, such as Ontario Hydro, are "fat" and replete with economic redundancies.

In the case of Ontario Hydro, the municipal utilities provide a constant downward pressure on price and Hydro's traditional pride in cost minimization — its cost ethic — has tended in the direction of reducing costs and increasing productivity.

In 1968 a marked increase in cost escalation became apparent and Hydro embarked on a cost-effectiveness programme. Despite this emphasis on cost effectiveness, however, during the research phase of one of our special studies we observed a major facility decision which, in our opinion, had not been adequately justified by a cost/benefit study. In this case Hydro has deferred action pending a more thorough investigation. This serves, however, as a reminder that in Hydro, as in any large publicly owned utility, constant attention is required to create organizational patterns and systems to promote productivity and efficiency and to guard against organizational redundancy, excessive bias in favour of the low risk option and a tendency to promote 'showcase' technology.

Capital Investment Timing

In some countries, most notably Sweden and the United Kingdom, utility construction programs are being used as an instrument of national economic policy, construction being delayed if the economy is overheated and accelerated if the need for increased economic activity is urgent. For the same level of system reliability this practice has an effect on costs. If the result is increased costs, consumption may be reduced.

Electric utility construction in Canada has not been used extensively as a contra-cyclical tool, perhaps because this kind of economic control has been considered as primarily an area of federal government concern. To an increasing degree, however, provinces are becoming interested in economic planning and it is reasonable to anticipate that during the next two decades there will be growing pressure on major utilities to plan the timing of large capital expenditures in the light of broad economic concerns.

Characteristics of Policy Issues

All the foregoing issues are of concern to Government and to Hydro. There may be conflict. For example, Hydro's decision to burn gas in order to reduce air pollution could be in conflict with the Government's energy policy which seeks to conserve a non-renewable resource. Conversely a Government edict against the burning of gas might inhibit Hydro's effectiveness in meeting environmental standards. Each issue is related to some or all of the others so that a decision in one area means reconsideration in one or more of the others. The issues have varying time horizons. For example, the time required to implement any adjustment of the capital works program would be measured in years, whereas the effect of a decision to withhold a rate increase would be felt almost immediately.

In aggregate, the policy issues comprise a complex web in a technical, economic, social, and political sense. The consequences of decisions become difficult to assess. The choice of a nuclear reactor system, for example, has an important bearing on system security and the cost of power well beyond the comprehension of most laymen. Such comprehension is, however, vital if the political decision-maker is to arrive at decisions which will result in effective, consistent policy direction for Hydro.

SECTION VI

A ROLE FOR THE FUTURE

This and subsequent sections will be concerned with those conclusions of Task Force Hydro that relate to the future role of Ontario Hydro within the matrix of Ontario's economic, social and political life. The recommendations are intended to ensure that Hydro policy in the 1970's and 1980's is consistent with the objectives and aspirations of the total community as expressed in the policy of the Government of Ontario. Much of the discussion relating to the recommendations appears in prior sections and apart from necessary explanatory notes and comments will not be repeated.

The Vital Importance of Electricity

The *raison d'être* of Ontario Hydro is to ensure that the people of Ontario are supplied with electrical energy. Any doubt that the continuing supply of electrical energy is central to Hydro's role and fundamental to the economic process is dispelled by considering the situation in the United Kingdom where in July, 1971, striking miners virtually crippled British industry by cutting off coal supplies to the Central Electricity Generating Board. In the United States during the past few years the Environmental Protection Act has enabled conservationists to impede the construction of thermal generating plants to the point where the country now faces the distinct possibility of a critical power shortage.

To assure the supply of electricity under conditions that would serve the interests of the total community, Government established Hydro in Ontario as a publicly owned enterprise. In so doing, the Government tacitly acknowledged an obligation to provide electrical energy to the people of the Province, the delivery function being carried out by Hydro and the municipal utilities.

In Task Force Hydro's view this carries with it the implication that, while Hydro and the utilities have had responsibility from the beginning for the delivery system, Government has reserved for itself the responsibility for determining the broad policy within which the system will operate.

As a result of the origin of the municipal utilities as entities distinct from Ontario Hydro, Government policy direction to the delivery system as a whole has not been through a single channel. There has been direct communication of policy to Ontario Hydro, but the utilities also have been influenced to a considerable degree by Government policy with respect

to the municipalities. This arrangement has served well, but changing conditions have raised important questions concerning its appropriateness for the future.

The increasing range and complexity of policy issues facing Government and Hydro and the degree to which such issues as regional development and environmental policy bear on the total delivery system suggests the need for a more clearly defined channel of communication for policy direction.

If Hydro in Ontario is to continue serving the best interests of the whole community, there should be established a single channel for Government policy direction. This should be from Government to Ontario Hydro and should recognize Ontario Hydro as having an overall responsibility for the delivery system.

Service to the total community requires that regional requirements be fully satisfied. Task Force Hydro considers that, to ensure responsiveness to local needs, there should be continuing reliance on strong municipal utilities working co-operatively within the delivery system.

We therefore recommend that:

- 1.1 (a) *Ontario Hydro be responsible to the Government of Ontario for the generation, transmission and distribution of electric energy in the Province.***
- (b) *Ontario Hydro discharge this responsibility in compliance with the overall policy of the Provincial Government.***
- (c) *Except where economic considerations dictate otherwise Ontario Hydro delegate its responsibility for the distribution of electric energy to utilities that are agents of municipalities.***

Hydro – A Delivery Agency

Although Hydro must fulfil its mandate under the broad policy direction of Government, there are compelling arguments favouring a clear and distinct separation between Hydro operations and those of Government.

As a huge enterprise involving the management of over \$5 billion worth of assets and relying upon a high degree of technological sophistication, Hydro must have the authority and flexibility for contractual and

commercial arrangements, for innovation in the delivery of its services to the public, for the development of programmes to meet general as well as local and regional needs, and for the recruitment of a wide range of people with special skills or talents.

Direction and management skills must be of the kind associated with the best in business and, in the day-to-day operations, Government intervention must be held to a minimum. The C.O.G.P. recommendation that Government's policy making function be held separate from service delivery must be honored.

Because of its size and complexity and because of the pervasive nature of the operation, of all organizations related to Government, Hydro is unique. At least three ministries, Treasury, Economics and Intergovernmental Affairs, Environment, and Natural Resources have a major and continuing concern for Government policy as it relates to Hydro. Others, such as Industry and Tourism, Labour, Transportation and Communications, Consumer and Commercial Relations and Attorney General, have a lesser but, nevertheless, important interest.

Thus many Ministries are involved, with the majority being in the Resources Development Policy Field. As pointed out in Section V Government policy as it relates to Hydro is complex and it is difficult to identify a single ministry which alone should have the major responsibility for such policy.

In order to emphasize that Government involvement with Hydro is on a policy level and in order to define a clear channel for policy direction from Government to Hydro we recommend that:

1.2 Hydro be a delivery agency of the Provincial Government receiving broad policy direction from the Government through the Provincial Secretary for Resources Development.

Demand, Cost and Reliability

Hydro's traditional "power at cost" mandate has meant the satisfaction of peak demand at the lowest possible cost consistent with given standards of reliability, financial soundness and independence. As explained earlier, this has also resulted in maximizing the consumption of electricity and in Hydro's attaining significant economies of scale.

But economies of scale, which historically have reduced unit costs, are now more than offset by rapidly rising costs of new capacity. This means that as new generation is added the average unit cost of power tends to rise whereas formerly it had remained constant or fallen. This, coupled with the

impact on the environment, makes a policy of seeking maximum consumption inappropriate.

Hydro's mandate must, therefore, be redefined in terms of the broad range of policy issues discussed in Section V. There can no longer be any question of "maximum consumption". We must now consider a mandate requiring Hydro to "meet the demand" at the "lowest feasible cost".

The lowest feasible cost must be established in the light of all relevant policy issues. It will include, where appropriate, environmental and certain social costs and finance charges which, at least until recently, have not been considered. Demand also must be limited to that which can be supplied economically and within the restrictions implied by lowest feasible cost.

Figure 7 sets out a series of possible corporate objectives for Hydro which, taken together, describe a mandate for Hydro in terms of the policy issues discussed in Section V. The lines, representing the objectives, emanate from a central point. The axis of the diagram represents the two objectives which are fundamental to Hydro's mandate — an assured supply and a standard of reliability. As pointed out at the beginning of this Section, an assured supply of electricity is fundamental to Hydro's role.

We therefore recommend that:

1.3 *Hydro be directed through the Provincial Secretary for Resources Development:*

- a) *to meet demand for electricity in Ontario at the lowest feasible cost.*
- b) *to maintain those standards of reliability which are agreed upon from time to time by the Government and Hydro.*

To meet demand at lowest feasible cost will require recognition that the growth of peak demand is probably not, in the long term, independent of pricing strategy. It will also require Hydro's best efforts to achieve the optimum use of off-peak capacity.

Task Force Hydro has undertaken a separate study to deal with the philosophy of power costing, including such factors as bulk power pricing, promotional rates, cost pooling in the bulk power system, and the controversial issue of marginal cost pricing. To ensure that costs in future

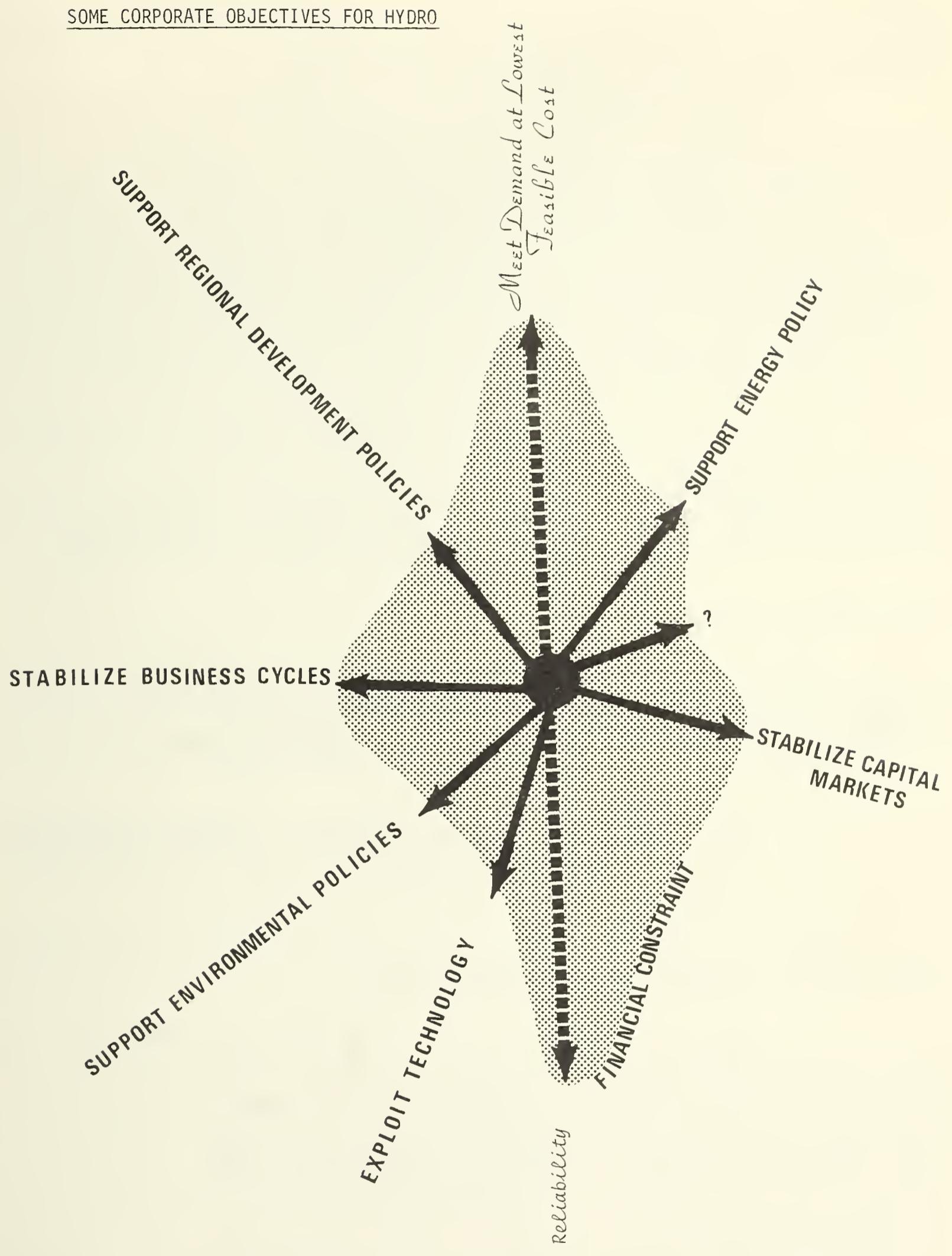


Figure 7

actually are the lowest feasible will require continuing efforts to improve cost effectiveness and cost/benefit ratios within Hydro.

Reliability of supply, as noted, is a fundamental consideration in electric power planning. Failure to achieve reliability can result either from underestimating demand and capacity or the forced outage of equipment due to weather, natural disaster, labour disputes and other causes. Reliability depends on the amount of reserve generating capacity, the quality of equipment and maintenance, back-up transmission capacity and interconnections with other systems. Through the Northeast Power Coordinating Council, the interconnected utilities, including Hydro, have achieved a higher level of reliability than would otherwise have been possible.

The cost/benefit relationships are highly technical and, therefore, Government must rely to a very large extent on advice from Hydro in agreeing to standards of reliability. In view of the very large capital costs involved the reserve margin to be maintained is of particular importance.

Exploitation of Technology

Advantages could accrue if more of Hydro's technological expertise were transferred to the private sector. Pending submission of the report of the Make or Buy Study, which will contain detailed recommendations, we recommend that:

1.4 *Hydro exploit its technology through developing and pursuing policies to share its technological expertise with the private sector.*

Support for Environmental and Energy Policy

We support the contention, as a principle of pricing, that the consumers of electricity should bear the burden of the social costs of production and distribution, as well as the direct or economic costs. However, higher prices will result which may or may not be consistent with public policy as it relates to industrial development. Also, it may not be consistent with government objectives as they relate to social policy, given the different incidence of the impact of higher rates among income groups (although we have earlier cautioned that this should not be a prime consideration in power pricing policy). For either of these reasons it might therefore be decided that, for example, the high cost of providing underground high voltage transmission facilities should be borne by subsidy and not be included in the cost of power.

We recommend that:

1.5 As a general rule, the additional costs incurred for environmental concerns be included in electricity prices.

The Advisory Committee on Energy has been established by the Government to make recommendations with respect to Provincial energy policy. The Committee will make specific recommendations bearing on the relationship of energy to the environment. Task Force Hydro has cooperated with A.C.E. in areas relating to Ontario Hydro and electrical energy generally. Recommendations from A.C.E. will reflect the development of new attitudes calling for greater emphasis on research leading to more efficient use of available energy resources and more effective means to conserve non-renewable fuel resources and to preserve the environment.

Hydro has participated in establishing environmental standards, but the problems of the future are more demanding and constitute a challenge to Hydro's ingenuity and technical expertise.

We recommend that:

1.6 Hydro actively participate in the development and support of Government policies with respect to energy and the environment.

Marketing Policy

Once energy and environmental policies for the Province are clearly defined Hydro can determine its policy and basic objectives in these areas and, within this framework, develop an appropriate marketing policy.

We recommend that:

1.7 Hydro's marketing policy be designed specifically to support Provincial energy and environmental policy and, within the limits thereby imposed, to ensure the most efficient use of the system's capital facilities.

Stability of Capital Markets

The question of financing will be dealt with in greater detail in subsequent studies being conducted by Task Force Hydro. Pending the publication of further reports we recommend:

- 1.8 *There continue to be close coordination between Hydro and the Ministry of Treasury, Economics and Intergovernmental Affairs in financial matters.***

Support for Economic Policy

A number of objectives which may be described as special elements of economic policy are illustrated in Figure 7. The manner in which these policy issues could in principle affect Hydro's operations has been discussed in Section V. The degree to which any one of them is to be brought to bear in practice clearly requires government direction. All will have important financial and cost implications.

Task Force Hydro believes that to the extent that these programmes impose burdens on Hydro which are not imposed on private firms, their costs should be recoverable from the public treasury. Any requirement that they be recovered by Hydro in the cost of power contributes to a departure from a neutral, cost-based rate structure.

We therefore recommend that:

- 1.9 *In the event that Hydro be required to support regional development or contra-cyclical construction policies, the additional costs of so doing should not be built into power prices but should be borne by subsidy from the Provincial Treasury.***

Financial Policy

Task Force Hydro is seeking a financial policy which will be more flexible and will serve future requirements better than those currently imposed on Hydro by statute. Consideration is being given to the use of a target rate of return on investment, the rate to be decided by the Government after consultation with Hydro. The rate of return might replace the current statutory requirements calling for a reserve for stabilization of rates and for contingencies and a debt retirement fund. It would be intended that the actual rate be adjusted as required by changes in other policy variables affecting Hydro's overall objectives.

Recommendations will be included in a subsequent Task Force Hydro report.

Hydro and the Citizen

In order to establish an avenue of appeal for customers, suppliers and members of the general public who have been unable to obtain satisfactory redress of grievances through the usual channels, it is recommended that:

- 1.10 Hydro establish a procedure whereby representations and appeals from the public can be heard by a body responsible to the senior policy making body of Hydro but not a part of the line organization.*
- 1.11 There be no requirement for the consent of the Minister of Justice and Attorney General to bring an action against the Hydro Commission or any member of the Hydro Commission.*

We understand that a similar recommendation has recently been submitted to the Government by Ontario Hydro.

In order to ensure that Hydro responds to the desire of the public to participate in the affairs of government and public corporations, it is recommended that:

- 1.12 Hydro consider the establishment of ad hoc citizens' task forces to provide for citizen participation in the locating of generating and transmission facilities and in other matters of concern to the public.*

As advocated by C.O.G.P. and in keeping with its role as a delivery agency of government, Hydro's quasi-judicial role should be curtailed. The Ministry of Consumer and Commercial Relations assumes general responsibility for technical standards but encourages industry where possible to take responsibility for its own inspection services.

It is therefore recommended that:

- 1.13 Responsibility for the establishment of electrical safety standards be transferred to an agency of the Ontario Government other than Ontario Hydro, but responsibility for the actual inspection function continue to rest with Hydro.*

The Establishment of Hydro's Role

The objectives of meeting the demand for electricity at lowest feasible cost, reliability, stabilizing of capital markets, supporting energy, environmental and regional policies and the exploitation of technology are in competition. Each objective has public policy and Hydro operating policy implications. Decisions on one must be taken within the context of decisions on others. All must be measured, to a greater or lesser extent, in the light of the financial constraints within which Hydro operates.

Further, it is important to remember that Hydro's primary and overall objective must continue to be to serve the people of the Province, both as customers and as citizens, by ensuring an adequate supply of electricity. To compromise this primary objective is to compromise the entire system. Decisions regarding the priority of objectives must be made within this context.

There are certain decisions which must be made by Government alone, upon which will rest a sound and consistent policy for Hydro. We therefore recommend that:

1.14 Government policy, defining the broad objectives and constraints within which Hydro must operate, be specified by the Lieutenant-Governor in Council.

In some areas of policy for Hydro the Government will require the advice and technical expertise of Ontario Hydro before a decision is reached. This implies bilateral decision-making.

We therefore recommend that:

1.15 To give expression to Government policy for Hydro and to define Hydro's mandate, a contract be drawn up between the Provincial Government and Hydro.

We visualize a contract patterned on that in existence between the French Government and Electricite de France, drawn up on a five-year basis and subject to annual review. It would detail the agreements reached between the Government and Hydro, defining such matters as Hydro's financial objectives, projected capital requirements, major requirements for support by Hydro for Government's regional development plans, or detailed arrangements for support of environmental research.

We recommend that:

- 1.16** *Government policy for Hydro that is not defined by Orders-in-Council or by the Government-Hydro contract be determined by the Provincial Secretary for Resources Development in consultation with the senior policy body of Hydro.*
- 1.17** *Hydro be directed to pursue other objectives which may be established from time to time by the Lieutenant-Governor in Council.*

SECTION VII

THE STRUCTURE OF THE ENTERPRISE

Having redefined Hydro's role for the future it now remains to consider what structural modifications might be appropriate. These should be considered in the light of important assumptions implicit in Hydro's redefined role.

An Approach to Responsiveness

The responsiveness of the delivery system to Government policy would be enhanced if it were recognized that Government's objectives and those of Hydro are fundamentally compatible. While there will be disagreement as to how a particular objective can be best achieved, a solution satisfactory to both parties will always exist. In other words the nature of conflict resolution in Hydro-Government relations is unlike that associated with labour-management negotiations in which one party may "lose" and the other can "win". This "positive sum" relationship suggests a number of principles which should apply to relations between Hydro and Government.

- There will be a full sharing of relevant information so that decisions will be based on complete technical, economic and political knowledge coming from Government and from Hydro.
- Within this context, there will be a search for creative solutions which enhance both Government policy objectives and Hydro system objectives.
- With full information the implications of decisions will be better appreciated through the careful evaluation of reasonable alternatives.
- Mutual understanding will be enhanced as Hydro begins to better appreciate the problems and objectives of Government, and vice versa. As understanding develops, Hydro will gain an appreciation of the growing importance of the Government's social goals and will respond by supporting the intent as well as the letter of Government policy.

Some Criteria for the New Structure

As a delivery agency of Government, Hydro in Ontario must receive firm policy direction from Government. We have already made recommendations to this effect. We have also suggested certain criteria which, if fulfilled, will enhance the effectiveness and responsiveness of the delivery system.

- Government policy direction should be transmitted through a single channel to the delivery system. This implies a single body with responsibility for receiving the Government policy directive and translating it into working policy for the entire delivery system.
- There should be representatives on this body from the bulk power system (Ontario Hydro) and the distribution system (O.M.E.A.).
- Provision should be made for the rationalization of the distribution system.

Task Force Hydro envisages no major change in the existing structure. The total delivery system will, therefore, continue to be composed of the generation and transmission sector and the distribution sector.

The generation and transmission sector, or the wholesale power component of the system, is essentially responsible for the generation and transmission of power in the Province. The distribution sector, or the retail unit, is responsible for distribution of power from the bulk transmission grid to the individual customer and for serving the needs of the customers. Operational policy for both of these sectors should be the responsibility of a single body.

Ontario Hydro will comprise the generation and transmission sector, plus a small part of the present distribution facilities — essentially the existing direct industrial customers plus rural customers in the power district. The bulk of the distribution sector, including the distribution utilities, will remain outside the corporate structure, but will be subject to its operational policies.

The Hydro Corporation

In his book, *Government and Parliament*, Herbert Morrison writes:

“We seek to combine the principle of public accountability, of a consciousness on the part of the undertaking that it is working for

the nation and not for sectional interests, with the liveliness, initiative, and a considerable degree of the freedom of a quick-moving and progressive business enterprise”.

Morrison was explaining the reasons for setting up a Crown Corporation. We think his reasons apply to Ontario Hydro and we recommend that:

1.18 Ontario Hydro be designated as a Crown Corporation to be known as the Hydro Corporation of Ontario or Ontario Hydro.

The Crown Corporation (hereinafter referred to as the Hydro Corporation) would be a proprietary Crown Corporation in that it would be responsible for the management of a commercial operation involving the supplying of services to the public and ordinarily would be required to conduct its operations without parliamentary appropriations. In this respect, it would compare to the Canadian National Railways or Air Canada. We recommend that Hydro be known as a Crown Corporation rather than as a Commission for a number of reasons.

- The future role recommended for Hydro fits that defined by C.O.G.P. for a Crown Corporation in Ontario, and would be inappropriate to the role foreseen for a Commission.
- A Crown Corporation, as compared to a Commission, connotes the “organizational distinctness” and clear “separation of policy and delivery” recommended by C.O.G.P.; it provides, more aptly, for Morrison’s “considerable degree of freedom”.
- The structure for the Hydro Corporation would closely resemble the organizational form of private business and set the tone for a proper emphasis on economic performance and on the idea of a “quick-moving and progressive business enterprise”.
- Such corporate form would encourage delegation of the administration of day-to-day business. Such delegation would enable the enterprise to take quick action on commercial opportunities.
- A Corporation would be expected to organize its accounts, highlighting output rather than input, in the same manner as do similar firms in the private sector thereby facilitating comparison of performance with such firms.

- Since there are few precedents, the Hydro Corporation could be structured to suit contemporary requirements and to allow maximum flexibility for adjustment to future conditions.
- As explained in Section VIII, the Corporation could issue special non-voting “equity account shares” to establish and define the “interest” of the municipal utilities.
- Finally, the adoption of a new corporate form will signal a break with the past to those in Hydro, to those in the utilities and to the public. This signal may be very important for it will be taken as an indication of the Government’s determination that, following careful assessment, Hydro and the utilities will, in fact, be reshaped as part of an overall plan to restructure the public sector in Ontario. The retention of the Commission form on the grounds that structure is really unimportant, and that nothing can be achieved merely by changing the corporate form, will be interpreted as tacit support for the status quo.

The implementation of these recommendations will require amendments to certain provisions of the Power Commission Act. Although Ontario Hydro under the revised terms of the Act would become known as a Corporation rather than a Commission, it would continue as a body corporate without share capital in the Province of Ontario.

The Board of Directors

There must be a senior body within the Hydro Corporation to be responsible to the Government for the operation of the Corporation and to receive the policy direction from the Government, which we have argued should be applied to the total delivery system. In the Crown Corporation the Board of Directors would serve this purpose.

We recommend that:

1.19 The Board of the Hydro Corporation be empowered to deal with the Government on behalf of the total delivery system so as to facilitate consistent policy direction for the total system.

Duties of the Board

The Board must focus on policy and thereby ensure that Hydro’s policy supports and is consistent with Government policy. It should also be recognized that Government will look to the Hydro Board for advice in formulating those of its policies that will affect Hydro. Policy deliberation

within the Board must, therefore, involve those with knowledge of the system and with experience in government. The Board should strive to develop, with Government, procedures to assess the implications of alternative solutions before decisions are taken, and to promote long term planning so that there is minimum delay and disruption within the delivery system.

In directing the activities of the delivery system the Board will also focus on policy. Its primary concern will be to ensure that its policies are being put into effect and that the Corporation is being managed effectively and efficiently. Where necessary the Board will assume responsibility for conflict resolution between the wholesale and retail sectors of the delivery system.

The present Commission appears to function largely in a managerial role, devoting a large percentage of its time to the approval of such matters as capital expenditures of the municipal utilities; revision of retail rates; acquisition of, or payment for, land or property; purchase or rental of equipment; changes of personnel; financing requirements, and arrangements for short term notes. A study of Commission agendas over a 10 week period in 1971 during which 14 meetings were held revealed that, of over 300 items dealt with, only a very small number might be classified as matters of policy.

We recognize that the attention paid by the Commission to routine administrative matters is in fulfilment of statutory responsibilities. We visualize, however, a different role for the new Hydro Board -- one in which the focus is on policy. It is in this context that the duties of the Board and its responsibilities should be defined to include the following;

- to establish with the Government a formal contract setting out the expectations of each party and specifying the purpose and role of Hydro;
- to translate Government policy for Hydro into corporate policy, thereby giving direction to senior management;
- to appoint and fix the remuneration of the President, Vice Presidents and other officers of the Hydro Corporation;
- to approve the policies for allocation of the cost of power and rate structures for both wholesale and retail sectors;
- to approve the annual operating and capital budgets of the Corporation;
- to approve the long range strategic corporate plans;

- to approve specific major capital expenditures and contracts;
- to approve agreements for technical exchange and joint ventures with other organizations;
- to approve the terms and conditions which are to apply to contracts between the Hydro Corporation and the distribution utilities;
- to ensure that the policies and plans approved by the Board are being carried out satisfactorily relative to predetermined standards and time and cost targets;
- to ensure that all interested parties, including the public, are fully informed of the Corporation policies, plans, objectives and activities.

Composition of the Board

The need for business experience on the Board is accepted as fundamental. The need for Government representation is, in our view, just as important. The Hydro Board sits as the interface between Government and one of its largest and most important agents. The dynamic nature and significance of problems to be resolved suggest that judgement based on long experience in government and general knowledge of current government operations are essential. The complexity of the situation, resulting in a constant need for compromise, suggests that a profound understanding of Hydro's position should exist within Government.

An important question to be answered is whether government experience should be brought to the Board by members of the Legislature or by civil servants. We feel that the inclusion of members of the Legislature on the Board would imply a degree of political intervention in the day-to-day operation of the Corporation which might be appropriate if Hydro were to be considered as a Ministry of Government or as a delivery agency directly associated with a particular Ministry. But we have argued strongly for as great a degree of separation as possible between policy and delivery, and for Government control over Hydro to be defined insofar as possible in policy terms. We therefore consider it more appropriate for Government to name civil servants as members of Hydro's Board.

Above all, members of the Board must be selected for the quality of their contribution. Each must be appointed not as a representative of industry or government or the distribution sector, but as an individual whose experience and judgement *per se*, will contribute to the leadership of the Hydro Corporation.

Although Board members should not be considered as representatives of regions or special groups there should be a reasonably balanced representation of those broad sectors of the community with an interest in Hydro affairs.

We recommend that:

1.20 The Hydro Corporation Board consist of eleven members appointed by the Lieutenant-Governor in Council as follows:

- *a Chairman, for a five year term, renewable*
- *the President of the Hydro Corporation, ex officio*
- *two representatives from nominations submitted by the Board of Directors of the Ontario Municipal Electric Association, for three year terms, twice renewable*
- *two senior civil servants*
- *five members-at-large to be named from outside the delivery system and government and to be selected for expertise in industrial, corporate, economic or other matters relevant to Hydro, appointed for three year terms, twice renewable.*

The Chairman of the Board and the President

The special role of the Hydro Board, acting as a buffer at the interface between Government and the delivery system, affects the role of the Chairman of the Board and that of the President. It also affects the relationship between them.

The Chairman and the President will both be members of the Board in which is vested total responsibility for the management of the Corporation. Each must serve the Board in different but complementary capacities. The Chairman will be the presiding officer, concerned with policy and relations with Government and the public, while the President will take responsibility for the operation of the Corporation. They must, therefore, cooperate closely, the President reporting to the Chairman. They must be mutually informed so that there is a free, complete, and continuous exchange of information between the operating divisions of the Corporation, the Board and the Government.

The Chairman of the Board

The Chairman of the Board will have a key role to play in the relations of the Board with Government and the general public. His duties will include:

- presiding at meetings of the Board;
- reporting on behalf of the Board to the Provincial Secretary for Resources Development;
- overseeing, on behalf of the Board, the management of the Corporation;
- consulting with the Provincial Secretary for Resources Development and with appropriate Ministers and others in Government to ensure that the Board has the information from Government necessary to keep Hydro policy consistent with the broader framework of Government policy;
- working with the President to ensure that the Board has full access to technical information and all other required data from the Corporation;
- advising the Provincial Secretary for Resources Development and other members of Government so that Hydro's point of view is brought into the pertinent policy deliberations of Government.
- representing the Board and Hydro to the public and ensuring that the general public is adequately informed about Hydro's corporate objectives, policies, plans and activities.

We recommend that:

1.21 The Chairman be appointed on a full time basis and his orientation be outward to the Ontario community and to the Government and that, with his Board, he focus on the translation of Government policy into consistent and achievable corporate objectives and policies.

Task Force Hydro sees the Chairman's role as being so important to the policy deliberations of Government and Hydro that we suggest that the Provincial Secretary for Resource Development give consideration to inviting the Hydro Chairman to be present at meetings of the Resources Development Policy Field Committee when matters relevant to Hydro are under review.

The President

The President of Hydro would perform a role that would complement that of the Chairman. The President's duties would include:

- managing the affairs of the Corporation;
- translating corporate objectives and policies into divisional objectives and strategies;
- ensuring that the Board is informed to enable it to assess the degree to which corporate objectives are being achieved;
- acting as a Director of the Corporation.

We recommend that:

1.22 The President be responsible to the Board of Directors for directing the affairs of the Corporation in accordance with goals and objectives established by the Board.

SECTION VIII

A RATIONALIZED RETAIL SYSTEM

In Section III we outlined the reasons which confirm a need for a more rationally structured distribution system. If changes are to be introduced they must be designed to make the delivery system more effective and, at the same time, to preserve its present strength.

In our definition of Hydro's future role we stated that there should be continuing reliance on strong municipal utilities working cooperatively within the delivery system. We therefore put forward recommendation **I.1 (c)** to the effect that:

Except where economic considerations dictate otherwise, Ontario Hydro delegate the distribution of electric energy to utilities that are agents of municipalities.

We have recommended that the Hydro Corporation be responsible to Government for the total delivery system but that where possible the municipal utilities be responsible for the operation of local distribution systems. It remains to define more precisely the division of responsibility for management within the delivery system.

We further recommend that:

1.23 Ontario Hydro be directly responsible for the management of that part of the delivery system which generates and transmits bulk power.

Hydro studies have indicated that the most satisfactory point at which the bulk power system should interface with the distribution system is on the load side of the 230,000-115,000 volt transformer station. In an effort to assist the municipal utilities Hydro has entered into agreements to own, operate and maintain facilities above 4,000 volts in cases in which a utility does not wish to own them. In order to facilitate cost of power allocations which are fair to all retail customers, and to reduce duplication and non-productive costs, there must be a commonly defined point of division of the wholesale and retail sector.

Until larger municipalities are formed and utilities rationalized, there will be a number of municipal utilities which will continue to take power at lower voltages than the secondary side of the transformer station.

Looking to the future, however, we recommend that:

1.24 The division of responsibility between the wholesale and retail functions be drawn at the main secondary bus-bar of the transformer station.

As the new municipal utilities are organized a clear division of responsibility for the operation of both sectors of the total distribution system will be established. The utilities will own, operate and maintain all low voltage, customer responsive facilities.

Criteria for Rationalization

It is agreed that any rationalization plan should call for a reduction in the number of utilities. An important question arises as to the proper number to be achieved and the size of the larger units. There are other important questions regarding the essential nature of the municipal utility and its relationship to the community and to the delivery system. There is no apparent reason or need to change the traditional relationships upon which Hydro in Ontario has been established. The objective of rationalization should be to preserve local autonomy and customer responsiveness as it now exists and, at the same time, to make the system as a whole more responsive to Government policy.

Each distribution utility should be large enough:

- to conduct the full range of activities from the transformer station to the customer;
- to adjust to policy objectives, yet not too large to permit the selective application of policy;
- to provide an optimum response to the needs of the citizen, but not so large as to be unresponsive to locally perceived wants;
- to relate to a local democratic process which considers the provision of electricity in the context of other public service needs;
- to be fully competent and efficient and have influence in shaping Hydro's corporate objectives and to contribute to providing "self-regulating" pressure on the Hydro Corporation;
- to permit an individually tailored agreement with Hydro, rather than an "across-the-board" application of policy;

- to be similar in configuration to other municipal utilities across the Province, thus enabling Hydro to deal with each consistently in technological and administrative terms.

Since new municipal governments are being formed, and in consideration of the Ontario Government's policy respecting the role of these new governments, and in further consideration of the criteria mentioned above, it seems logical to suggest the reorganization of the distribution utilities within each area so that the boundaries of the new utility are contiguous with those of the new government.

Upper Tier versus Lower Tier

New units of municipal government are currently being structured in one or other of two ways. A two-tier municipality will comprise a number of lower tier units, each with its own council, all encompassed by an upper tier municipality with its council. A single tier municipality will have one council responsible for the entire area. Correspondingly, there are therefore two possibilities for electrical utility operation. In an "upper tier" approach the existing utilities would merge and operate as one utility serving the entire area. In a "lower tier" system each municipal unit would establish a utility which would operate separately, perhaps with some degree of regional co-ordination.

The advantages of the upper tier approach are:

- It facilitates the application of uniform rates throughout the entire area.
- It offers opportunity for larger scale planning and development of the electrical distribution system and standardization of distribution voltages and design throughout the area.
- By eventually reducing the number of units in the southern part of the Province to 25 or 35 it facilitates the administration of the distribution sector.
- It offers possibilities for economies of scale.
- It provides a larger economic base for financing expansion.
- It facilitates the planning of the electrical system across a broad regional base.
- It minimizes the cost of re-establishment of the distribution system by reducing the number of physical connections at the boundaries.

- By reducing the number of collective bargaining units it eliminates the “ratcheting” of wages within an area.
- Difficulties of staff reallocation are minimized since one administrative unit arranges transfers within the area.

The disadvantages of upper tier are:

- Municipal customers may be more remote from their utility.
- There would be difficulty in providing for the election of commissioners with individual election expenses of candidates being relatively high.
- The “bureaucratic” image of the organization may be increased by the fact of larger sized units.

The advantages and disadvantages of the lower tier approach, with few exceptions, are simply the obverse of the advantages and disadvantages of the upper tier approach.

After full consideration of these advantages and disadvantages we favour the upper tier approach.

In view of the large number of technical and administrative problems to be solved which have to do with the transfer of assets and personnel and in some cases involve the integration of portions of the power district into the new utilities, careful planning must precede each step of the rationalization process.

We recommend that:

1.25 Municipal utilities be rationalized into upper tier regional utilities where and as new municipal government is implemented.

1.26 The area to be served by the regional utility be the entire area served by the new municipal government.

1.27 A first step toward rationalization encompass those areas of the Province that now have new municipal governments, with the experience thus gained to guide future steps.

It is unlikely that more than 51 of the 202 municipal utilities serving 1000 customers or less, will be absorbed into the portion of the Province to be covered by reorganized municipal governments by 1980. This means that from 1972 until well after 1980 approximately 151 of these 202 small utilities will continue to exist in their present form.

Once rationalization has been initiated and adequately tested in areas under the jurisdiction of new municipalities it would be desirable to extend the rationalization process to include areas that have not been reorganized. Consideration should be given at the same time to the future role of the private utilities in the delivery system.

We therefore recommend that:

1.28 *Those responsible for planning the rationalization of the retail system attempt to achieve some rationalization of utilities which do not lie within areas soon to be under the jurisdiction of new municipal governments, including the private utilities.*

The fundamental relationship which has existed between the municipality and its Hydro utility should be preserved. The essential element is responsiveness to customer requirements and to the needs of the community as a whole. At present in all but three cases all municipal commissioners are elected with the exception of the Mayor who is a member of the Commission *ex officio*. Election on a regional basis could be difficult but would not be impossible. An alternative would be the appointment of a committee of the regional council to manage the utility, thus placing it under the direct control of council.

Task Force Hydro feels that some measure of local political control over the utility by the municipal council is desirable for many of the same reasons that the Provincial Government must have control over the Hydro Corporation. But we feel strongly that this should not be allowed to interfere with the integrity of the delivery system. We therefore see a need for commissioners who are not members of new municipal councils.

We recommend that:

1.29 *The commissioners of regional utilities be appointed by the municipal council from outside the council with the exception of the chairman of the council who shall be a member ex officio of the commission.*

Depending on local circumstances the chairman of the council might appoint a delegate. Hydro's corporate objectives must be reflected in varying degrees in the operating policies of the utilities. In some cases, for example power pricing, all utilities would be affected uniformly while in some in which regional factors were involved the application would be selective.

Current legislation gives Ontario Hydro wide powers which have never been used. Instead Hydro and the utilities have developed and improved standards of service through mutual agreement. Task Force Hydro feels that this spirit of co-operation should continue and that future policy decisions for the delivery system can be based on bilateral agreement.

We recommend that:

1.30 The Hydro Corporation give effect to its policy and that of the Provincial Government through contracts with each utility, such contracts to reflect a working agreement between the Corporation and the utility.

The contracts will reflect agreement reached between the Hydro Corporation and each utility. They will include such topics as the following:

- capital budgets
- bulk power and retail pricing structures
- delivery conditions
- security of service
- terms of payment
- marketing policy
- financing of distribution utilities
- reliability standards
- environmental requirements

while excluding:

- all policy and operational considerations in the management of utilities, such as, but not restricted to, employment policies and practices, the ownership and management of assets, and the right to contract. Provision should be made in the contract for periodic review, as necessary, to reflect changes in policy.

Ownership and Control

Perhaps the most important principle underlying the recommendations we have made with respect to a role and a place for Hydro and for an approach to the rationalization of the distribution system, is that the delivery system as a unit be responsive to general policy direction from the Provincial Government. This means that there must be an effective means of control. The question of control is vital.

In recommending that Ontario Hydro be designated a Crown Corporation we have raised an important issue for the O.M.E.A. which claims ownership for the municipalities by virtue of the "equity" in Ontario

Hydro held by each municipal utility. The nature of this claim should be clearly understood and agreed to by all if the measure of control we recommend is to be achieved.

The "interest" of the municipalities in Ontario Hydro may be viewed from two perspectives. On the one hand every agreement that we have reviewed between Ontario Hydro and a Municipal Corporation for the supply of power contains a term identical to or analogous to the following:

"The Commission shall be a trustee of all property held by the Commission under this Agreement for the Corporation and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon the said property for all moneys expended by the Commission under this Agreement and not repaid to it. At the expiration of this Agreement the Commission shall determine and adjust the rights of the Corporation and other municipal corporations supplied by the Commission, having regard to the amounts paid by them, respectively, under the terms of their agreements with the Commission and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council."

The second perspective arises from the fact that most municipalities have been required since 1906 to pay as part of the cost of power supplied, an annual sum, in the words of the current section of the Power Commission Act:

"sufficient to form in forty years, with interest at 4 per cent per year, a sinking fund for the repayment of the advances made by the Province of Ontario under this Act for the cost of the works, for the repayment of any other indebtedness incurred or assumed by the Commission in respect of the cost of the works, and for the restoration of any reserve or other funds of the Commission utilized for the payment of the cost of the works."

Ontario Hydro appears to have been organized originally with the view that ultimately all its assets would be held by it in trust for the participating municipalities on some proportionate basis "as may appear equitable to the Commission". In many of the contracts in which such a provision is found, a term provides for the constructing by Ontario Hydro of works and transmission lines necessary to service the municipality and by their terms these agreements would seem to have been intended to extend only to facilities constructed to bring the municipality into a system operated by Ontario Hydro. Subsequently, however, Ontario Hydro purchased

power generating works and other assets unrelated to any of the agreements between it and the Municipal Corporations. These assets were vested in the Ontario Hydro absolutely.

In addition, the Power Commission Act was amended in the 1940's to facilitate a conversion from 25 cycles to 60 cycles and Ontario Hydro was authorized to do all that was necessary to reconstruct and convert existing assets to a 60 cycle system. Correlatively, the Act was amended to provide that any equipment or apparatus so converted became Ontario Hydro's property. This provision remains as Section 30 of the current Power Commission Act.

Thus, it appears that the participating municipalities were intended to have a beneficial interest in some of the property held by Ontario Hydro. At the same time, however, it is clear that Ontario Hydro owns some of its works and property absolutely.

Initially the legislation establishing Ontario Hydro gave no direction either as to the use to be made of the sinking fund contributions or as to how they were to be represented in Ontario Hydro's financial statements. The first amendment to the Power Commission Act directed that the sinking fund be used initially to retire Ontario Hydro's indebtedness to the Province of Ontario. In 1927, however, the Act was amended to require Ontario Hydro to make an annual report containing:

“a statement with respect to each system showing the amount standing to the credit of each municipality on sinking fund account (including the sums contributed by it) as at the 31st day of October last preceding.”

Since that time the balance sheet has recorded the total accumulated contributions to the sinking fund account and has not taken into account application of the funds in payment of Ontario Hydro's indebtedness.

Subsequently, Ontario Hydro's auditors recommended in their 1951 report that this sinking fund account should be redesignated as “system equity” or “system capital”. In the early 1960's the appropriate designation was actually made on Ontario Hydro's balance sheet.

In summary, it appears that the Municipal Corporations were intended to be participants in the System then operated by Ontario Hydro with legal title to the assets of the System being registered in Ontario Hydro. The interests of the Municipalities have become uncertain with the renewal and expansion of the System and frequency conversion, although some recognition has been given to such interests when the sinking fund for the

retirement of debt was set up as equity. In furtherance of this intent, it is desirable to establish and define the interests of the municipalities. We have been advised however, that the sinking fund reserve does not create or represent any proprietary right in Ontario Hydro for the contributors to the sinking fund. Under the Act the sinking fund is simply to be applied to the reduction of Ontario Hydro's indebtedness.

We recommend that:

1.31 Control and ownership of the Hydro Corporation continue to reside with the Government of Ontario, but the interest of the municipalities be established and defined as follows:

- a) An equity account be established on the balance sheet of the Hydro Corporation as an item to replace the item "equities accumulated through debt retirement charges" and certificates be issued to the participating municipalities and to the Corporation as trustee for the power district for their proportionate shares therein.*
- b) The certificates be described as non-voting participating shares in the equity account of the Hydro Corporation (equity account shares) and new certificates be issued annually to represent the changing interests of each participating municipality and the power district in the same manner as the debt retirement charges have been apportioned annually in the past.*
- c) The certificates entitle each participant holding such certificates to receive on the liquidation or winding up of the Hydro Corporation a share proportionate to the dollar amount of the certificates held, of the surplus funds realized on liquidation after payment or provision for payment of all debts and obligations of the Hydro Corporation.*

SECTION IX

REGULATION

Types of Regulation

Two types of regulation are relevant to Ontario Hydro:

- regulation that is formulated exclusively in terms of Hydro and those of its activities which relate to the energy sector, and
- regulation directly affecting Hydro but aimed at achieving objectives external to Hydro or the energy sector.

Our discussion of Hydro's future mandate and the range of policy issues which will have a bearing on it indicate that the second kind of regulation will be imposed on Hydro to a very considerable extent in the future.

Energy and the Environment

The Ministry of the Environment assumes responsibility in Ontario for environmental policy and for establishing the regulations which relate to it. Should the Advisory Committee on Energy recommend the creation of a body with similar functions relating to energy, then a department of government and an agency of government, as yet unnamed, would be involved in the regulation of two policy areas of major importance to Hydro. The Corporation will be subject to these regulations but, as we have already recommended, it should have an important part in their formulation.

Regulatory Board

Hydro has been vested with a high degree of autonomy under the Power Commission Act. The Organization has been largely self regulating although internally the O.M.E.A., through its Power Costing Committee, has exercised an influence that effectively constitutes a degree of regulation on rates and on occasion the Government has influenced Hydro to support its policies in other areas. The question that now must be answered is whether past practices are appropriate for the future, or is some other design necessary.

A procedure for future regulation of the Hydro Corporation is an independent regulatory board established to direct the activities of the electrical delivery system in the public interest through its interpretation of public policy. Such boards are common in the United States and there has

been some experience with this procedure in Canada. Traditionally these bodies have been concerned with such things as aggregate rates, discriminatory pricing, return on capital and cost effectiveness. They have not, however, been interested in such matters as environmental policy, energy policy, capital investment timing and regional development — all important areas of Government initiative and Hydro concern.

In considering the appropriateness or inappropriateness of a board as part of the regulating mechanism for the Hydro Corporation there are a number of relevant considerations:

- Since Hydro is a public corporation, there is no conflict between customers' expectations and the desire of shareholders for a profit. This weakens the argument of the necessity for a public board to protect the public interest.
- We have already stated in Section V that it is not possible to deal effectively with one policy issue in isolation from others. Therefore, a board that was interested in some of the policy issues and not in others could not, by itself, provide effective regulation.
- If other boards were introduced with power to regulate in such areas as, for example, the environment or financial policy fields it would appear to be a duplication of regulatory functions and expertise already established within existing Ministries or agencies of government.
- Past experience has confirmed that regulatory boards require time to arrive at decisions and the resulting delays can cause expense to the regulated utility and inconvenience and annoyance to the public.
- Boards tend, with the passage of time, to come to identify with the bodies they are established to regulate. They are influenced by their own past decisions and, as a consequence and again with the passage of time, they may lose objectivity.

For these reasons Task Force Hydro feels that an independent board is not the most appropriate mechanism for regulating the Hydro Corporation. We feel that the degree of external regulation that is needed can be provided through policy direction given to the Hydro Corporation through the Provincial Secretary for Resources Development. We look for more effective internal regulatory pressure on the Hydro Corporation as the rationalized municipal utilities gain strength, skill and experience.

SECTION X

THE HYDRO CORPORATION – AN APPROACH TO REORGANIZATION

The Organization Study

Working in parallel with the Role and Place Project Team and in close cooperation with Hydro's senior management, Task Force Hydro's Organization Study Group has developed an approach to reorganization which reflects the changing needs of the new Hydro Corporation in the light of the role and place recommendations.

The delivery system was envisaged to have four principal missions:

- to plan, operate and maintain the system for generation and transmission;
- to ensure the design and construction of facilities required for generation, transmission and distribution;
- to distribute electrical energy;
- to provide support services.

The four principal missions imply four divisions for Hydro, a Distribution Division, a Generation and Transmission Division, a Design and Construction Division and a Hydro Support Services Division.

Consideration was given to the establishment of a Corporate Office which would consist of the President, a Group Vice President – Distribution, a Group Vice President – Bulk Power System and a number of Staff Vice Presidents.

The role of the Corporate Office was considered to be:

- to assist in shaping consistent corporate objectives;
- to translate corporate objectives into specific, measureable divisional objectives, constraints, operating policies, strategic manpower and financial resource policies;
- to allocate resources among divisions, promoting “high productivity” activities and curtailing “low productivity” activities;
- to enforce compliance to corporate objectives, measuring divisional performance against divisional objectives;

- to provide support in limited terms for labour relations, compensation and evaluation systems, manpower development systems and control systems.

Members of the Corporate Office would think of themselves principally as staff to the President rather than as line officers.

The Organization Study has suggested that consideration be given to greater decentralization of the personnel and accounting control functions and to the concept of an expanded services branch. A more highly differentiated operation has also been suggested for the engineering branch.

Before detailed implementation is begun examination in depth will be required and studies should be initiated by the Corporate Office once it is established. Task Force Hydro has been impressed by the cooperation it has received in the conduct of the Organization Study, and by the willingness on the part of the great majority of managers to define "problem areas" with complete frankness and to suggest new approaches which might better serve in the future. We therefore recommend that:

1.32 Once the Government has established a redefined mandate for Hydro the senior governing body of Hydro require management to submit for its approval a detailed plan and timetable for an approach to reorganization.

SECTION XI

SUMMARY OF RECOMMENDATIONS

- 1.1 (a) *Ontario Hydro be responsible to the Government of Ontario for the generation, transmission and distribution of electric energy in the Province.*
- (b) *Ontario Hydro discharge this responsibility in compliance with the overall policy of the Provincial Government.*
- (c) *Except where economic considerations dictate otherwise Ontario Hydro delegate its responsibility for the distribution of electric energy to utilities that are agents of municipalities.*
- 1.2 *Hydro be a delivery agency of the Provincial Government receiving broad policy direction from the Government through the Provincial Secretary for Resources Development.*
- 1.3 *Hydro be directed through the Provincial Secretary for Resources Development:*
 - (a) *to meet demand for electricity in Ontario at the lowest feasible cost.*
 - (b) *to maintain those standards of reliability which are agreed upon from time to time by the Government and Hydro.*
- 1.4 *Hydro exploit its technology through developing and pursuing policies to share its technological expertise with the private sector.*
- 1.5 *As a general rule, the additional costs incurred for environmental concerns be included in electricity prices.*
- 1.6 *Hydro actively participate in the development and support of Government policies with respect to energy and the environment.*

- 1.7 *Hydro's marketing policy be designed specifically to support Provincial energy and environmental policy and, within the limits thereby imposed, to ensure the most efficient use of the system's capital facilities.*
- 1.8 *There continue to be close coordination between Hydro and the Ministry of Treasury, Economics and Intergovernmental Affairs in financial matters.*
- 1.9 *In the event that Hydro should be required to support regional development or contra-cyclical construction policies, the additional costs of so doing should not be built into power prices but should be borne by subsidy from the Provincial Treasury.*
- 1.10 *Hydro establish a procedure whereby representations and appeals from the public can be heard by a body responsible to the senior policy making body of Hydro but not a part of the line organization.*
- 1.11 *There be no requirement for the consent of the Minister of Justice and Attorney General to bring an action against the Hydro Commission or any member of the Hydro Commission.*
- 1.12 *Hydro consider the establishment of ad hoc citizens' task forces to provide for citizen participation in the locating of generating and transmission facilities and in other matters of concern to the public.*
- 1.13 *Responsibility for the establishment of electrical safety standards be transferred to an agency of the Ontario Government other than Ontario Hydro, but responsibility for the actual inspection function continue to rest with Hydro.*
- 1.14 *Government policy, defining the broad objectives and constraints within which Hydro must operate, be specified by the Lieutenant-Governor in Council.*
- 1.15 *To give expression to Government policy for Hydro and to define Hydro's mandate, a contract be drawn up between the Provincial Government and Hydro.*

- 1.16 *Government policy for Hydro that is not defined by Orders-in-Council or by the Government-Hydro contract be determined by the Provincial Secretary for Resources Development in consultation with the senior policy body of Hydro.*
- 1.17 *Hydro be directed to pursue other objectives which may be established from time to time by the Lieutenant-Governor in Council.*
- 1.18 *Ontario Hydro be designated as a Crown Corporation to be known as the Hydro Corporation of Ontario or Ontario Hydro.*
- 1.19 *The Board of the Hydro Corporation be empowered to deal with the Government on behalf of the total delivery system so as to facilitate consistent policy direction for the total system.*
- 1.20 *The Hydro Corporation Board consist of eleven members appointed by the Lieutenant-Governor in Council as follows:*
 - *a Chairman, for a five year term, renewable*
 - *the President of the Hydro Corporation, ex officio*
 - *two representatives from nominations submitted by the Board of Directors of the Ontario Municipal Electric Association, for three year terms, twice renewable.*
 - *two senior civil servants*
 - *five members-at-large to be named from outside the delivery system and government and to be selected for expertise in industrial, corporate, economic or other matters relevant to Hydro, appointed for three year terms, twice renewable.*
- 1.21 *The Chairman be appointed on a full time basis and his orientation be outward to the Ontario community and to the Government and that, with his Board, he focus on the translation of Government policy into consistent and achievable corporate objectives and policies.*

- 1.22 *The President be responsible to the Board of Directors for directing the affairs of the Corporation in accordance with goals and objectives established by the Board.*
- 1.23 *Ontario Hydro be directly responsible for the management of that part of the delivery system which generates and transmits bulk power.*
- 1.24 *The division of responsibility between the wholesale and retail functions be drawn at the main secondary bus-bar of the transformer station.*
- 1.25 *Municipal utilities be rationalized into upper tier regional utilities where and as new municipal government is implemented.*
- 1.26 *The area to be served by the regional utility be the entire area served by the new municipal government.*
- 1.27 *A first step toward rationalization encompass those areas of the Province that now have new municipal governments, with the experience thus gained to guide future steps.*
- 1.28 *Those responsible for planning the rationalization of the retail system attempt to achieve some rationalization of utilities which do not lie within areas soon to be under the jurisdiction of new municipal governments, including the private utilities.*
- 1.29 *The commissioners of regional utilities be appointed by the municipal council from outside the council with the exception of the chairman of the council who shall be a member ex officio of the commission.*
- 1.30 *The Hydro Corporation give effect to its policy and that of the Provincial Government through contracts with each utility, such contracts to reflect a working agreement between the Corporation and the utility.*
- 1.31 *Control and ownership of the Hydro Corporation continue to reside with the Government of Ontario, but the interest of the municipalities be established and defined as follows:*

- *An equity account be established on the balance sheet of the Hydro Corporation as an item to replace the “equities accumulated through debt retirement charges” and certificates be issued to the participating municipalities and to the Corporation as trustee for the power district for their proportionate shares therein.*
 - *The certificates be described as non-voting participating shares in the equity account of the Hydro Corporation (equity account shares) and new certificates be issued annually to represent the changing interests of each participating municipality and the rural power district in the same manner as the debt retirement charges have been apportioned annually in the past.*
 - *The certificates entitle each participant holding such certificates to receive on the liquidation or winding up of the Hydro Corporation a share proportionate to the dollar amount of the certificates held of the surplus funds realized on liquidation after payment or provision for payment of all debts and obligations of the Hydro Corporation.*
- 1.32 *Once the Government has established a redefined mandate for Hydro the senior governing body of Hydro require management to submit for its approval a detailed plan and timetable for an approach to reorganization.*

APPENDICES

APPENDIX I

FURTHER WORK

This first report has dealt with fundamental recommendations describing a role for Hydro during the next two decades and emphasizing the relationship of Hydro and Government and Hydro and the citizen. Task Force Hydro plans further recommendations.

A number of projects, the research for which was completed in June 1972, will result in further reports which will deal with such topics as External Financing, Power Costing and Rate Philosophy, the Nuclear Power Program and Make or Buy Policy.

APPENDIX II

TASK FORCE HYDRO

MEMBERS OF (THE STEERING) COMMITTEE

CHAIRMAN

J.D. Muncaster

President and Director

Canadian Tire Corporation Ltd.

H.A. Crothers
President
Crothers Limited

R.M. Dillon
University of Western Ontario
Executive Director
Task Force Hydro

A. Frame
Past President
Ontario Municipal Electric
Association

D.J. Gordon
General Manager
The Hydro-Electric Power
Commission of Ontario

Dr. J.K. Reynolds
Deputy Provincial Secretary
for Resources Development

R.B. Taylor
Vice President
The Steel Company of Canada
Limited

APPENDIX III
TASK FORCE HYDRO
THE ROLE AND PLACE PROJECT TEAM

G.N.M. Currie Project Director	Urwick, Currie & Partners Limited
D.V. Fowke Assistant Project Director	Hickling-Johnston Limited
R.M. Dillon Executive Director	Central Staff, Task Force Hydro
J.B. Smith Research Director	Central Staff, Task Force Hydro
J.O. Beaulieu	Central Staff, Task Force Hydro
J.R. Foster	Urwick, Currie & Partners Limited
R.O. Hedlin	Ralnor Corporation Limited
T.G. Hillis	Hickling-Johnston Limited
P.R. Hollings	Urwick, Currie & Partners Limited
B.R. Jones	Hickling-Johnston Limited
J.E. Martin	P.S. Ross & Partners
S.R. Murray	Central Staff, Task Force Hydro
E.P. Neufeld	University of Toronto, Department of Political Economy
C.J. Nutch	Central Staff, Task Force Hydro
J.T.G. Posner	Central Staff, Task Force Hydro
J.M. Schiel	P.S. Ross & Partners
W.W. Stevenson	Acres Consulting Services Limited

F.P. Whitlock	Central Staff, Task Force Hydro
P.L. Wilson	Urwick, Currie & Partners Limited
J.R. Woodcock	Hickling-Johnston Limited

APPENDIX IV

GLOSSARY OF TECHNICAL TERMS

bulk transmission system or grid	- a network of interconnected power lines used to transmit electric energy at high voltages from power stations to load centres
bus-bar	- an uninsulated bar or tube used as an electrical conductor at a circuit junction, e.g., at a transformer station
energy	- that which is capable of doing work, equal to average power multiplied by a time interval
energy demand	- a customer's demand for electric energy from a utility
firm power	- power intended to have assured availability to the customer to meet his load requirements
forced outage	- the loss of a component of a power system resulting from emergency conditions, improper operation of equipment or human error
fossil fuels	- fuels, e.g., coal, natural gas and oil, extracted from the earth and consisting of the remains or traces of plants or animals of prehistoric ages
hydro-electric generating station	- a power station in which the force of falling water spins turbines which in turn drive electric generators
kilovolt	- one thousand volts; a unit of electromotive force
kilowatt	- one thousand watts; a unit of electric power
kilowatt-hour	- a unit of energy equal to the work done by one kilowatt acting for one hour
kva	- kilovolt-ampere; a measure of electrical capacity in a system
lignite	- brownish-black coal, intermediate between peat and bituminous coal.

load	- the amount of power needed to be delivered at a given point on an electrical system.
megawatt	- one thousand kilowatts
peak period (of day, year etc.)	- a designated interval of time during which the maximum average load is consumed or produced on a power system
thermal (-electric) generating station	- a power station using heat for producing steam to rotate a turbine to drive an electric generator. Fossil fuels or a nuclear reactor may be used as the heat source.

APPENDIX V

July 20, 1972

Mr. J. Dean Muncaster
Chairman, Task Force Hydro
Ferguson Block, Queen's Park
Toronto, Ontario

Dear Mr. Muncaster:

As a member of the Steering Committee of Task Force Hydro, I have signed Report Number One giving my support and endorsement to the majority of recommendations.

However, there are certain recommendations with which I am in disagreement. These are outlined below, with my reasons for dissent.

The items with which I disagree are:

1. - 1.18 which recommends establishment of a Crown Corporation to carry out the functions now handled by the Hydro-Electric Power Commission of Ontario, and 1.20 which recommends appointment of civil servants, rather than elected officials, as members of the proposed corporation's board. Adoption of either of these recommendations would, in my judgement, tend to make the HEPC or its successor much less responsive to the public than at present, and would remove much of the access which consumers now have to those bodies responsible for supplying their electric power.

2. - 1.1 which recommends giving to Ontario Hydro authority for distribution of electric power, removing the authority now vested in the municipalities and their utilities; 1.30 which recommends that the municipal utilities be controlled via power contracts, and 1.19, a recommendation that the Hydro Corporation be empowered to negotiate with Government on behalf of the municipal utilities.

Objective comparisons with other jurisdictions over the years have shown that users of electric power in Ontario pay among the lowest rates extant in North America, consistent with quality of service. A main reason for this is the fact of control by elected municipal commissioners who have traditionally ensured that their communities are in each case provided with the required quality of service at the cost needed to provide it.

3. - 1.25 which recommends establishment of upper tier Hydro commissioners in those areas under the jurisdiction of regional governments without consideration of local costs of operation or the effects of geographic influences; 1.29 which provides for replacing elected municipal commissioners with commissioners appointed by regional councils. A change to regional operation of power utilities would not result in improved service but would most certainly, in many instances, result in higher rates.

And

4. The suggestion that Ontario Hydro be competitive with and comparable to private power utilities and that Ontario Hydro be required to earn a comparable rate of return on invested capital. Requiring Ontario Hydro to earn a rate of return similar to that of a comparable privately owned utility would have the effect of making rate increases necessary for all consumers, and such a requirement would not have the effect of improving service to the consumers who would be paying the higher rates.

In summary, while I agree with and support the over-all report of the Steering Committee, I am concerned that the recommendations discussed above represent threats to the quality and cost of electric service provided to the people of Ontario.

Respectfully submitted,

Andrew Frame.

Andrew Frame, P.Eng.
Member Steering Committee
Task Force Hydro

HD Ontario. Task Force Hydro.
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ECWX

Sept 22, 2010

